THE WHEAT MARKET AND THE FARMER IN MINNESOTA

1858–1900

BY

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A THESIS

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To

MY MOTHER AND FATHER

PREFACE

This study was begun with the purpose of investigating the development of the system by which the wheat of the Middle West is brought from the producer to the consumer It appeared that this might shed considerable light on the past history and present problems, both economic and political, of the region It must be admitted, however, that what has been accomplished falls far short of the original expectations This is partly the result of the fact that it was necessary, on every hand, to break new ground, because so little research has been done on the economic history of the Middle West A few studies, like *The Granger Movement* by Professor S J Buck, were very helpful. Scarcely anything, however, was available on agricultural technique, on the personnel, finance, organization and functioning of the local- and primary-market middleman system, on transportation costs and services in that section, or on the elusive matter of market demand Although this study is, therefore, narrowed, it may serve to emphasize the place of the market in the history of the West Perhaps later efforts in this direction will describe more completely the nature of market development, will note its effect on the type of agriculture and the economic organization and well-being of the farmers, will help to explain the causes of particular situations and accompanying political and economic philosophies, and will thus—to be very optimistic—give a sounder basis on which to attack contemporary agricultural problems

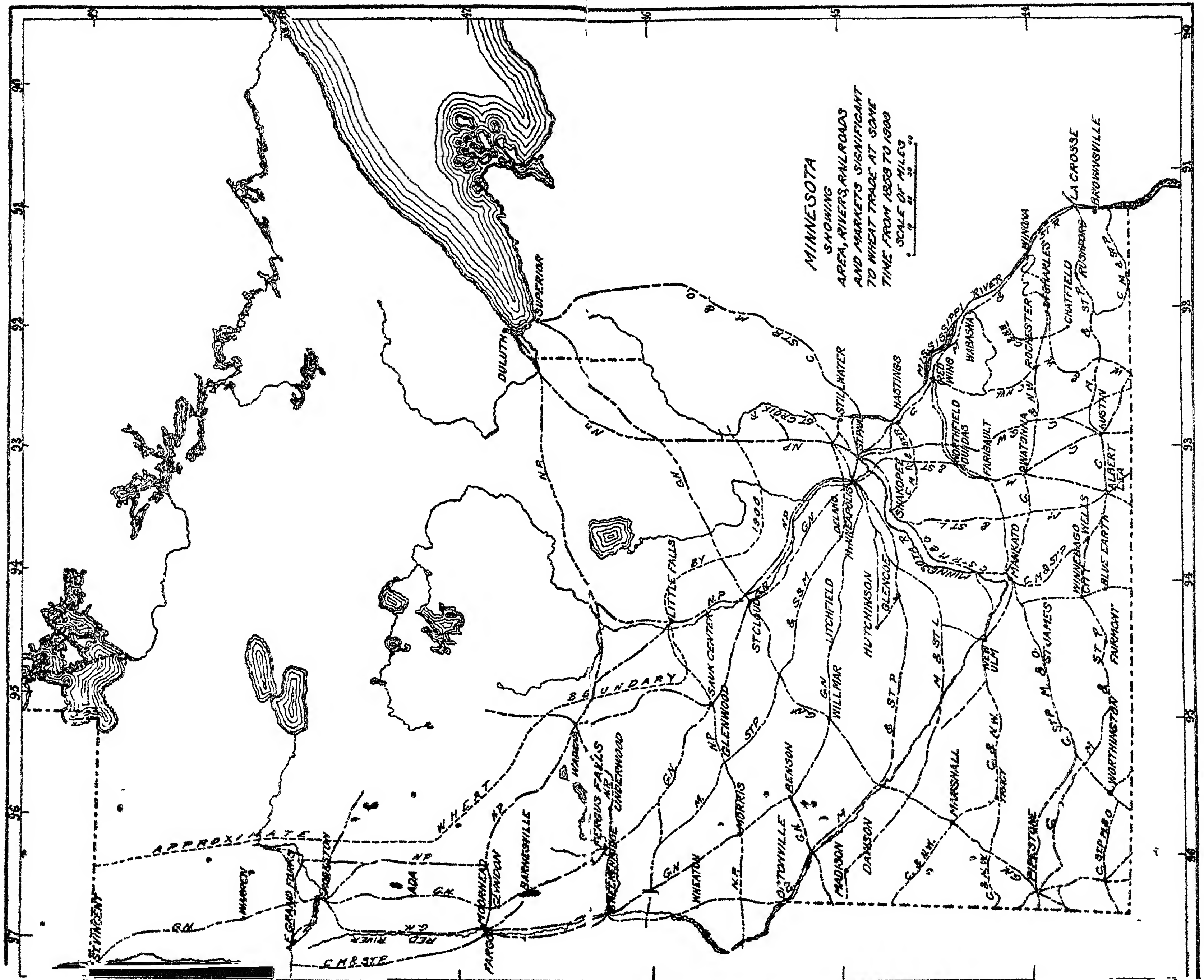
To the many persons who have assisted me in this under-

CHAPTER VIII

Big Business in the Wheat Trade, 1895-1900

CHAPTER IX

Conclusion


MINNESOTA
SHOWING
AREA, RIVERS, RAILROADS
AND MARKETS SIGNIFICANT
TO WHEAT TRADE AT SOME
TIME FROM 1858 TO 1900
SCALE OF MILES
APPROXIMATE WHEAT BOUNDARY
1900
MISSISSIPPI RIVER
MINNESOTA R
RED RIVER
ST CROIX R
DULUTH
SUPERIOR
STILLWATER
ST PAUL
MINNEAPOLIS
HASTINGS
RED WING
WABASHA
WINONA
LA CROSSE
BROWNSVILLE
ROCHESTER
ST CHARLES
CHATFIELD
RUSHFORD
NORTHFIELD
DUNDAS
FARIBAULT
OWATONNA
AUSTIN
ALBERT LEA
SHAKOPEE
MANKATO
WELLS
BLUE EARTH
WINNEBAGO CITY
ST JAMES
FAIRMONT
NEW ULM
WORTHINGTON
PIPESTONE
MARSHALL
TRACY
HUTCHINSON
GLENCOE
DELANO
LITCHFIELD
WILLMAR
ST CLOUD
SAUK CENTER
GLENWOOD
LITTLE FALLS
MORRIS
BENSON
DAWSON
MADISON
ORTONVILLE
WHEATON
FERGUS FALLS
UNDERWOOD
WADENA
BRECKENRIDGE
BARNESVILLE
MOORHEAD
GLYNDON
FARGO
ADA
CROOKSTON
GRAND FORKS
WARREN
ST VINCENT

CHAPTER I

Introduction

The development and functioning of the marketing system in the wheat-producing area of the north central states have brought enduring problems to the farmers of that region From the very first anti-monopoly agitation in the sixties to the recent activities of the Non-Partisan League and the Farmer Labor Party, the agrarian movements in those states have emphasized difficulties in the middleman system and have attempted to effect reforms to make the market more satisfactory to the producer

The exact nature of the difficulties has varied from time to time and from place to place, but, in general, the problems have been the same The system of grades has never been completely satisfactory Inspection and weighing at primary markets have again and again been attacked. Transportation has been a vital factor in the wheat trade, not only in the matter of services and charges, but also because of its relations with other wheat middlemen at country points and in the large primary markets One of the most significant questions has been that of storage control Another perplexing element, because of its intangibility, has been the matter of speculation and futures trading

The existence of such difficulties has called forth numerous attempts at reform. State grading and inspection, public control of warehouses, railroad legislation, and laws to limit trading in futures, on the one hand, and cooperative marketing, on the other, represent efforts to improve the system

Recent agitation for government "price fixing" and the widening influence of cooperative organizations are the latest steps in that direction

The present study has aimed to investigate the development of the wheat market in such a way as to discover the exact nature of the difficulties which the producer has found in the market, to analyze the conditions out of which these grew and to learn how the problems have been solved, in so far as a solution has been reached

The method employed has been to describe the development of middleman agencies in the wheat trade with special reference to one state for the years 1858 to 1900 These years mark the period of growth of the wheat market in the region northwest of Chicago from its earliest stage to the complete development of the essential elements in its organization and functioning The conditions in one state only have been described, in order to make this study more effective Minnesota was chosen because it was one of the leading wheat states in those years and because it experienced most of the difficulties encountered in the wheat market At no time were conditions in Minnesota typical of those in the whole section, but in the nature and sequence of the developments in its wheat trade and in the problems which have appeared this state is representative of the larger region.

CHAPTER II

THE RIVER-TOWN MARKETS, 1858-1867

WHEAT was not commercially important in Minnesota before 1858 The earliest agriculture in the territory was confined to the military and trading posts, lumber camps and Indian missions, where very little wheat was raised Flour for the settlements was brought up the Mississippi from neighboring states, or hauled down the Red River trail from the Pembina district [1]

A change occurred in the state during the fifties With the opening of the land west of the Mississippi to settlement,[2] and with the completion of the first railroads from Chicago to the river,[3] a strong immigration to Minnesota began [4] Over 30,000 people came each year from 1855 to 1857 [5]

[1] Le Duc, W G, *Minnesota Year Book*, 1853 (St. Paul, 1853), pp 82-83, Bond, J W, *Minnesota and Its Resources* (New York, 1853), chs iii and ix, Williams, J F, *History of St Paul and Ramsey County* (St Paul, 1876), p 377, *Seventh Census of the United States*, pp 1007-1008, *Minnesota Historical Society Collection* (St Paul, 1872), vol i, p 466, *Minnesota Pioneer*, March 6, 1850

[2] Treaties of Traverse des Sioux and Mendota, and the moving of the Sioux, 1851-1854, Holcombe, R I, *Minnesota in Three Centuries* (Mankato, 1908), vol ii, pp 291-324, Hughes, Thomas, "Treaty of Traverse des Sioux," *Minn Hist Soc Coll* (St Paul, 1905), vol x, pt i, pp 101-129

[3] To Rock Island, Illinois, 1854 *Minnesotian*, June 9, 1854, p 1. To Dunleith, Illinois, 1855 *Minnesota Pioneer*, June 11, 1855, p 2

[4] Williams, *op cit*, p 357, Minnesota Commissioner of Statistics, *Minnesota Its Resources and Capabilities* (1860-1861), pp 63-64

[5] *Ibid*, p 98, Williams, *op cit*, *Minnesota Executive Documents*, 1875, p 13

Some of these immigrants became farmers, a large number expected to make a fortune speculating in land[1] The demand for food grew faster than local production.[2] With the collapse of the land boom in 1857, immigration almost ceased, and the speculators were forced to become farmers[3] The following year was the first in which a surplus of agricultural products was raised[4] As a result an event occurred "not celebrated with illuminations or bonfires", as noted by a contemporary newspaper, but of great significance to the new state—the first eastward shipment of grain and flour[5] By 1859 the value of the wheat shipped from the state exceeded that of furs, which had been the most important commercial product since trading began in that region[6]

As wheat became an important article of trade, middlemen appeared to handle the product. The beginning of a wheat-marketing system in Minnesota is found in the appearance of wheat middlemen in 1858 Like the fur

[1] Com of Statistics, *Minnesota Its Place Among States* (1859), pp. 5 and 165, Williams, *op cit*, pp 377, 379-381, Baker, J H, "Life of H H Sibley," *Minn Hist Soc Coll* (St Paul, 1908), vol xiii, p 87, *Donnelly Papers*, 1857-1859

[2] Le Duc, *op cit*, 1851, p 49, Bond, *op cit*, Com of Statistics, 1859, *op cit*, p 111, *Commercial and Financial Chronicle* (1869), vol. viii, p 775, *Daily Pioneer and Democrat*, Sept 4, 1858, p 2, *Rochester Post*, Nov 3, 1866, p 2

[3] Williams, *op cit*, p 381, Com of Statistics, 1859, *op cit*, pp 143-145 and 165, Hill, J J, "History of Agriculture in Minnesota," *Minn Hist Soc. Coll* (St Paul, 1908), vol viii, p 87, *Daily Pioneer and Democrat*, Sept 5, 1858, p 2 "Thanks to the panic—thanks to the excessive speculation of last year which drove thousands of idlers to the plow"

[4] *Com and Fin. Chronicle* (1869), vol. viii, p 775, *Rochester Post*, Nov 3, 1866, p 2, *Daily Pioneer and Democrat*, Sept 4, 1858, p 2

[5] *Ibid* The "illuminations and bonfires" refer to the celebration on the admission of Minnesota to statehood in the spring of 1858 Rogers, G D, "History of Flour Manufacture in Minnesota," *Minn Hist. Soc. Coll.* (St Paul, 1905), vol. x, pt 1, p 39

[6] Com of Statistics, 1860-61, *op cit*, p 91

traders, they carried on their trade along the navigable rivers and shipped down the Mississippi to larger markets Hence the river towns became the first centers of the local wheat trade

The position of the farmers in relation to the market was largely determined by the distance which they lived from the river towns Beyond the settlements were the hunter-farmers, too far from market to be able to dispose of bulky field crops Those in the frontier communities could reach a barter trading point in the interior, or drive a long distance to a river town The most fortunate were the farmers who could sell their products in the cash markets near the river or, best of all, in the river towns, where prices were, as is explained later, always better than in the interior

Almost wholly detached from all settlements lived the first of these, the self-sufficing hunter-farmer He had ventured far out because of a desire to escape from settled communities or, more often, in order to have greater choice in the selection of his farm. He usually had a garden and a small grain field, chickens and perhaps a few cattle and hogs which ranged in the woods or on the prairie This settler carried furs, cranberries or wild ginseng to some distant village or trading post, but rarely any agricultural produce[1] He might happen to sell grain or butter to immigrants and to traders driving past, but he produced very little for sale[2] With the extension of settlements and of railroads westward,

[1] "Report of the Minnesota Horticultural Society," *Minn Ex Docs*, 1883-84, p 377. Furs remained for a long time an important commercial product. They were the only article which brought money on the extreme frontier, and were also important in settled communities Muskrats were trapped in the lake-prairie region of the south central part of the state, on the swampy land along the lakes, which was divided into preserves by the early settlers Cash was received for skins at such points as Mankato and St. Peter; but locally muskrat skins passed as money.

[2] *Minnesota Monthly* (1869), vol 1, p 201, O'Brien, F G, *Minnesota Pioneer Sketches* (Minneapolis, 1904), pp 185-186

this farmer, as was said by an observer, had to "join the advancing army of enterprising husbandmen or emigrate"[1] He generally chose the former lot, since a market—a requisite to successful farming—then appeared

The opportunities for selling farm products in the frontier communities were somewhat better The only middlemen were the storekeeper, at the crossroads or in the village, who exchanged his wares for farm produce, and an occasional miller, who ground for toll Barter exchange at the store was unsatisfactory for the farmer As a rule there was no competition for his produce, since there was generally but one store He might be unable even to dispose of what he had to sell "If we had too many oats, there was no sale, if we took two pails of butter to town, we dare not offer but one for fear of glutting the market", said one farmer[2] There was practically no attempt at grading according to quality, the price of superior wheat or butter was the same as that paid for inferior grades Most serious of all, cash payments were rare A farmer two days from the river complained in a characteristic way to a resident of a river county "The fact cannot be ignored that while Rice County is equally as good as Winona County, prices are up at a compensating value there, and *Cash* at that, where here grain goes a-begging, 'store pay' being the only commodity with which to buy the article"[3] Store pay was not desirable pay, for the frontier storekeeper charged exorbitant prices for his goods and paid very little for the farmers' produce[4]

[1] *Minnesota Monthly* (1869), vol, 1, p 201 A letter written by Britania J Livingston, Chain Lake Centre, Minn, Sept 25, 1868 (*Fairmont Sentinel*, Feb 14, 1925, p 2), contains this comment on the moving of the frontier "Frontier had taken his staff and shouldered his muskrat traps and sauntered off toward sunset"

[2] *Farmers' Union* (1867), vol 1, p 3

[3] *Winona Republican*, Feb 4, 1860, p 3

[4] To decrease the high price of what the farmer bought became one of

The larger towns within a day's hauling of the river became fairly satisfactory markets for farm products There, too, in earlier years exchange was largely that of goods or services for farm products [1] Newspaper subscriptions and tuition at the local high school were paid in a variety of produce, most commonly wood or wheat [2] The services of the village photographer and of the "fashionable tailor" were secured by payments in kind [3] The most important factor in barter trade was the general merchant, and after a time he was the only one taking produce for his wares [4]

In a few towns west of the Mississippi, cash payments for wheat appeared early, when some of the more enterprising merchants began to buy wheat aside from their other trade. The first cash wheat market in the interior seems to have been at Chatfield, a prominent trading town, where a federal land office was located Milo White, a general merchant, began to buy wheat for cash in 1859 He built a

the purposes of the Grange A state purchasing agent was employed for a while The papers of H H Runyon of Fairmont show that he paid a dollar for a gallon of kerosene at the local store, while the price in the larger markets was about 25 cents *Cf* Wedge, Curtiss F, *History of Fillmore County* (Chicago, 1912), vol 1, p 113

[1] From about 1857 those towns had newspapers, which were rich in information on local conditions

[2] Typical advertisements *Preston Republican*, Feb 8, 1862, p 3 "If any should wish to pay Tuition in Wheat, Pork, Lard, Butter, Wood or Groceries, they may probably do so, if they attend to the Matter in Season" *Rochester City Post*, Jan 5, 1861, p 3 "All kinds of produce will be taken in exchange for the Post"

[3] The *Preston Republican* of the early sixties regularly carried advertisements of the photographer and tailor

[4] Advertisements offering groceries and hardware for produce were very common A typical one is found in the *Minnesota Courier* (Austin), June 4, 1862, in which Hayes' general store offered its wares in exchange for wheat, barley, corn, rye, oats, butter, cheese, eggs, hides and furs After 1865 payments in kind were not generally received by others than the merchant

warehouse for storing the grain, and shipped by team to La Crosse in winter [1] Another type of cash wheat buyer in the interior communities was the miller The flour millers generally conducted a custom business, selling their toll flour locally, but a few began to buy wheat in the early sixties [2] Notable among these were "Honest John" Kaercher of Fillmore County and Ames and Archibald of Rice County [3] But the merchant and the miller were not primarily wheat middlemen, for their wheat trade was secondary to some other interest Not before the coming of railroads did the interior towns have specialized wheat buyers [4]

Even the best interior markets, however, paid comparatively low prices for wheat The available information indicates that, as a rule, wheat prices in the most highly developed of those markets were in the early sixties about 75 per cent of those at Winona, a river town, and very little above 50 per cent of Milwaukee prices.[5] By 1867 the prices

[1] Reminiscences of Mr White in Wedge, *Hist of Fillmore County*, vol. 1, p 268, *Chatfield Democrat*, Oct 27, 1860, p 3, H H Hill and Co, *History of Olmsted County* (Chicago, 1883), p 453

[2] The *Chatfield Democrat*, Feb 4, 1860, p 3 and the *Preston Republican*, March 6, 1863, p 3 carry typical advertisements of such millers

[3] Rogers, "Hist of Flour Manuf in Minn," *Minn Hist Soc Coll*, pt. 1, vol x, pp 39-43

[4] The *Rochester Republican*, Oct 10, 1863, p 3 notes that a wheat buyer representing a river-town buyer had been in town This is the earliest instance of its kind of which the writer has learned

[5] The only source for local price material is the market reports of the newspapers Only three towns in the interior had papers carrying such reports in the early sixties The *Chatfield Democrat* had quotations prepared by "One who knows" in 1857 The local, Winona, La Crosse, Milwaukee and Chicago prices, according to the latest reports, were given By 1860 the *Rochester Republican* and the *Preston Republican* carried similar reports

Price comparisons were based on market reports in the above papers and in the *Winona Republican* (weekly and daily) and the *Report of the Milwaukee Chamber of Commerce*, 1897, p 89

The *Winona Republican*, Oct 15, 1863, p. 3 notes the sale in Winona of a load of wheat at 85 cents a bushel which had been bought in Blue Earth County for 50 cents

in the interior were approximately 80 per cent of Winona's and 75 per cent of Milwaukee's These figures show clearly the difficulties with which farmers in the interior were contending as far as the market was concerned One farmer who lived a good day's haul from the river wrote to a river newspaper

of what avail is all this [fertility of the soil, etc.] compared with the advantages which your county possesses, together with those contiguous thereto, for the farmer? There you have everything to stimulate the farmer to renewed energy in the production of crops, by the fact that he finds a market for his produce nearly double what he can get here Wheat here is selling for 40 @ 50 cents and everything else in proportion, while farmers in your vicinity are getting almost double for their produce [1]

In order to get the higher prices offered in the river markets, the farmers often hauled their wheat to those towns which were located below the head of navigation on the Mississippi River and its branches, the Minnesota and the St Croix The most important for the Minnesota farmers were Mankato and St Peter on the Minnesota, Stillwater on the St Croix, and St Paul, Hastings, Red Wing, Wabasha, Winona, Brownsville and McGregor (Iowa) on the Mississippi.

The long haul to the river town tells an important and dramatic story of pioneer life The roads were little better than prairie trails and forest paths which were often impassable and sometimes dangerous Floods in the spring and fall left streams unfordable and roads heavy In winter, snowdrifts and pitch holes and the stiff, cold wind made the way to market a hard one for the farmers [2] Except in the coldest part of the year, those pioneers slept under their loads at night and had only the lunch brought from home

[1] Letter in *Winona Republican*, Feb 4, 1860, p 3

[2] *Ibid*, Oct 2, 1863, p 3, Wedge, *Hist of Fillmore County*, vol 1, pp 112-113.

Frequent notes in newspapers about the finding of farmers, frozen, by the roadside tell of tragedies which were common Indians, who were sometimes troublesome in the earlier years, and robbers, of whom there were plenty, added to the dangers and hardships of the trip to market

The distance to market for most of the early settlers was considerable The river-town newspapers often recorded the arrival of wheat teams from points 150 miles to the west A committee in the state legislature reported in 1861 that the mean distance for the farmers of the state to the nearest navigable river was 80 miles [1] Those who lived within a distance of three days by ox team of the market were considered fortunate Even at that, marketing one load of wheat—about 30 bushels—in six days cut deeply into their time and profits

The hardships of the long trip were endured because of the necessity of securing the best price possible for the produce of the farm, and of obtaining supplies at a more reasonable charge than in the interior towns The most highly developed wheat markets in the state were in the larger river towns, where the surplus grain from the agricultural hinterland was assembled for shipment down the river

It was commonly believed in the early years in Minnesota that a home market could be built up to consume the local products, through the encouragement of immigration and the development of local manufacturing industries [2] But

[1] *Minn Ex Docs*, 1861, p 2, *Winona Daily Republican*, May 21, 1863, p 3

[2] *Minn House Journal*, 1859-60, p. 174 Gov Ramsey said in an address to the legislature "For many years to come immigration ought to make our best market, consuming whatever surplus flour, meal, wheat, corn, oats, beef, pork we may raise and have to sell" After it was seen that immigration was not enough, the development of manufacturing was urged to furnish a home market

Letter in *Goodhue County Republican*, April 6, 1860, p 3: "To make farming profitable we must locate the agriculturist and the manufacturer side by side"

while each additional settler needed supplies until he harvested his first crop, he then became the producer of a surplus above his own needs Immigration only served to intensify the marketing problem, for most immigrants became farmers And the industrial development which Minnesotans so confidently expected came slowly, and Minnesota products were forced to seek an exterior market

In its need of a market, Minnesota was having a characteristic American experience [1] Had there existed no outlet for the agricultural products of the state, its development would have been immeasurably retarded The production of a growing surplus was, however, contemporaneous with an increase in the demand for food in the industrial areas of western Europe—especially in England—and in the United States [2] Wheat was an important element in the diet of the

[1] This need was most probably a very important factor in earlier agrarian disturbances like Bacon's Rebellion, Shays' Rebellion and the Whiskey Rebellion, in the dissatisfaction of the West with the Jay treaties and the diplomacy of the federalists, and in the support given Clay's American System by the West For the decade of the forties see J C Bell, *Opening of a Highway to the Pacific, 1838-1846, Columbia Studies* (N Y, 1921), vol xcvi, p 124, and *Hunt's Merchants Magazine and Commercial Review*, 1845, *passim* An article in the *Prairie Farmer*, Jan, 1850, p 13 is significant "There is not at present sufficient demand, either at home or foreign, to tax all the energies of the agriculturists, and this, to a great extent, accounts for the yet backward state in most instances, of American Husbandry"

[2] *Cf* wheat and flour imports into the United Kingdom, 1828-85, in House of Commons, 1886, 137th Sess, *Accounts and Papers*, vol xxiii, p 3, also, Page, Wm, *Commerce and Industry, Statistical Tables* (London, 1919), pp 142-144, and Porter, G R, *Progress of the Nation* (Hirst's edition, London, 1912), *passim*

The people of Minnesota were conscious of the growing importance of wheat for export The Com of Statistics in *Minn Its Progress and Capabilities*, 1860-61, p 52 quotes the *Mark Lane Gazette* as saying, "One fact is clear, that it is North America that we must look to in the future for the largest amount of our cereal produce" The following quotation from the *Winona Republican*, Oct 9, 1861, p 2 is typical of editorials appearing in Minnesota papers "As a cotemporary has re-

people of those regions And it was also easily stored, transported and graded so as to become an article of trade earlier and for longer distances than more bulky and more perishable products Its value was high compared with its weight, so that transportation to a distant market was economically possible [1] Furthermore, the fertile, clean, virgin soil of the frontier could produce a better grade of grain with the use of less capital and labor than was possible in the older sections where land had been cultivated longer [2] Therefore, the demand for food in those far-away regions was expressed in Minnesota as a demand for wheat, and no product brought so regularly a good price throughout the early years of Minnesota's history as did wheat [3]

marked the autumn that inaugurated the present Civil War, also produced the most bounteous crop ever known in the history of the country and of the world The scepter of power passes from King Cotton of the South to King Grain of the West

"This has put into the hands of the people of the West the means of bearing the pecuniary burdens consequent upon a struggle for the maintenance of the government While Europe does not aid us directly in putting down this unnatural rebellion, the Almighty, who holds nations in the hollow of his hands, has so ordered the seasons, that the nations of the old world are our most powerful allies"

Interest in the foreign market continued after the war

[1] For an interesting table illustrating this point, see the *Report of the Select Committee on Transportation Routes to the Seaboard*, 43rd Cong., 1st Sess, *Senate Reports*, no 307, vol 1, app, p 127, and *Internal Commerce of the United States*, 1891, pp xxiii-xxiv

[2] According to the *Pioneer and Democrat*, July 19, 1861, p 1, Minnesota wheat was quoted in the New York market at a premium over other spring wheat

[3] Based on a careful study of weekly prices of wheat, oats, corn, barley, pork, beef, eggs and butter as quoted in the *St Paul Pioneer* and in the *Winona Weekly Republican*, 1858-70, and of prices in the *Hastings Gazette* and *Goodhue County Republican* for shorter periods A temporary local shortage made the price of some products high compared with wheat, but only while the shortage continued Early settlers interviewed by the writer invariably stress the point that wheat was the only crop which brought, regularly, a fair price in the market, saying that there was "no market" for other products. In this relation it is interesting to read Von Thunen, *Der Isolirte Staat* (Berlin, 1875)

The development of the wheat market in the river towns was very much like the process in the interior, except that it began earlier and grew faster In both markets, wheat was the first agricultural product to be bought with cash Since, however, the river towns had a larger trade area, they developed a higher degree of specialization than any inland town at that time By 1858 cash was paid for wheat in Winona and St Paul, but mainly by people engaged in some other trade [1] A number of grain buyers were dealing principally in wheat in several towns by 1860 By that time the wheat business had become an independent concern in Minnesota's river trade, for the shipments from three towns, alone, totalled almost 2,000,000 bushels [2]

A characteristic of those markets was the variety of combinations of middleman functions The most common middlemen in the earlier years were those who stored, shipped and sold for others on commission. They did not generally buy the grain, but they served as agents of the owners, a very common practice in those years, when it was difficult to finance the wheat trade [3]

The storage business was a very important one, for a large proportion of the wheat of the region was assembled

[1] *Cf infra*, p 32

[2] *Report, Com of Statistics*, 1860-61, p 92

[3] The storage, forwarding and commission men were not originally interested in the grain trade When wheat was first offered for shipment, they accepted it like other goods, but when the wheat trade increased in importance, some began to handle wheat exclusively Many new agents also entered the s, f and c business A typical illustration is found in the case of a Mr Dufty of Shakopee who advertised in the *Scott County Argus* in 1861 that he was ready to buy 20,000 bushels of wheat at his hardware store, the next year he advertised as "general forwarding and commission merchant" Brooks, Johnson and Company of Minneiska bought and also stored and handled grain for others (*Rochester City Post*, Feb 6, 1864, p. 4) This was the Brooks who later became very important in the trade of Minneapolis

in the river towns in winter and stored until the river opened in the spring Some of the grain was shipped before the river closed in the fall, but the marketing of wheat was, of necessity, a winter job, for then the farm work was not pressing, and hauling on snow was easier than hauling on frozen or muddy roads in the spring and fall Since packet rates rose with an increase in traffic, it was not advisable for shippers to send so much grain down the river in the autumn as to increase the traffic greatly [1] Then, too, those who could hold the grain might make a considerable gain through the rise of prices over the winter

Though wheat in storage was at times a speculative investment, the possibility of gain was sufficiently certain to encourage dealers to buy wheat or not to sell that which they had For nine years, from the fall of 1858 to the summer of 1868, the average price a bushel of wheat in Winona was 97 1 cents during the fall marketing season, 101 9 cents during the winter and 113 5 in the early summer Therefore, in holding wheat from autumn to winter a gain of 4 8 cents was made, and from autumn to summer 16 4 cents The gains were, however, not so regular from year to year, as is seen from the following table [2]

[1] Comments on rates in the market reports of the river newspapers indicate that rates were very sensitive to changes in volume of traffic

[2] Prices from market quotations of the *Winona Weekly Republican*, 1858-68, and from *Winona Daily Republican*, Oct, 1861 to 1868 Up to Oct, 1861 the average for the season is the average of the highest and lowest prices of no. 1 wheat as recorded weekly, after that the average was obtained in the same way from both the weekly and the daily issue (since quotations were not regular in either) August, December and April were not included for the reason that these months were transitional, especially on account of the uncertainty as to the opening of the river Compare prices in *Report, Sel Com on Transp Routes to Seaboard, op cit*, vol 1, p 26

AVERAGE WHEAT PRICES AT WINONA
FALL, WINTER, SUMMER, 1858-1868
A bushel

Year	*Sept, Oct, Nov*	*Jan, Feb, Mch*	*May, June, July*
1858–1859	$0 629	$0 600	$0 750
1859–1860	0 579	0 880	1 033
1860–1861	0 703	0 616	0 600
1861–1862	0 605	0 625	0 602
1862–1863	0 715	0 937	0 990
1863–1864	0 814	0 899	1 371
1864–1865	1 376	1 061	0 866
1865–1866	1 134	0 954	1 602
1866–1867	1 531	1 794	1 990
1867–1868	1 625	1 828	1 547
1858–1868	$0 971	$1 019	$1 135

This table indicates that the losses or gains in holding wheat from fall to winter or summer were somewhat irregular In some years, in 1860-1861 and 1864-1865, the losses were considerable, during 1859-1860, 1862-1863, 1863-1864, 1865-1866 and 1866-1867 the gains were, on the other hand, significant

For the series of years the average summer price was 16 4 per cent higher than that of the preceding fall The losses and gains were all sustained by local owners, for grain in store was not hedged in the primary markets [1] For the larger investor who was able to secure loans on good terms and who had reserve capital for the poor years, the gains were attractive The small wheat owner who had practically no reserves and whose credit was low could not stand the losses of some years The farmers generally sold their grain on bringing it to market Many of them were in debt,

[1] *Cf* Boyle, J. E, *Speculation and the Chicago Board of Trade* (New York, 1920), pp 53-57 and Boyle, J E, *Chicago Wheat Prices for Eighty-One Years* (1922), p 3 "Hedging" is the term applied to the method used by cash grain buyers of protecting themselves against losses by selling the wheat, which they buy, to be delivered at some future time

and interest rates were high, they saw no guarantee in warehouse receipts, for the warehousemen were under no public supervision, they could not watch prices for a more opportune time to sell; and it was almost impossible for them to return later to dispose of their grain

To secure sufficient room for storing was always a problem Although new warehouses were built every summer, the increase in wheat production from year to year was so great that there was always doubt whether there would be sufficient room to meet the demands for storage until the opening of the river[1] The increase in the amount stored is indicated by the fact that there were about 200,000 bushels in all the Mississippi towns above La Crosse in March, 1860, while two years later Winona alone had over half a million[2]

The regular storehouse was the flat shed or warehouse built on the levee where grain could be transferred directly to boats If possible, the house was built on a slope so that grain could be received at the upper part[3] Often, any building which was reasonably weatherproof was used when the warehouses were filled Winona, the largest wheat market in Minnesota during the river period, had in 1862 thirty warehouses with capacities ranging from 5,000 to 100,000 bushels[4]

The warehouses were generally owned by the storage,

[1] This is illustrated by comparing comments on storage in the *Goodhue County Republican*, Feb 17, 1860, p 3 and March 3, 1870, p 3 The former notes, "It is a serious question whether our storage conveniences can be made to answer until the opening of navigation" The latter says, that warehouses were "groaning" under their burdens, and buying would have to cease if the river did not soon open Every summer the newspapers of the river towns recorded the building of new warehouses

[2] *Goodhue County Republican*, March 9, 1860, p 3; *Winona Daily Republican* Feb 24, 1866, p 2 and *Hastings Gazette*, Nov 24, 1862, p 2, in articles on the history of the river wheat trade

[3] *Commercial West*, July 20, 1901, p 17

[4] *Winona Daily Republican*, Feb 24, 1866, p 2.

forwarding and commission men, referred to above, and by local grain buyers. The regular packet lines were not especially interested in wheat warehouses, although it was not uncommon for them to have warehousemen as their agents. After the middle sixties the Winona and St Peter Railroad built its own elevators in Winona, where grain brought to the river by rail was stored to await shipment down the river. About 1867 a new factor entered the river-town storage business when grain dealers who operated in several towns and owned packets for carrying their grain secured warehouses.[1]

Although many warehouses were private, the commercial storage business was an important one. Storage rates were about 4 cents a bushel for the winter season of six months.[2] Warehousemen sometimes loaned money to the owners of grain in storage, but the terms were apparently not liberal.[3]

The public warehousemen were often agents of packets and of the railroad companies east of the river. They arranged shipments and contracted to deliver the grain to dealers in primary markets. As agents of the packets and railroads, they did not generally buy grain but merely tried to secure as much business as possible for their company.[4]

[1] *Cf. infra*, pp. 32-33.

[2] Quotations in newspapers. Illustration: *Goodhue County Republican*, Nov. 13, 1863, p. 3, giving rate at Red Wing as 4 cents from November to June.

[3] From advertisements and from information gained in conversation with river-town business men of the sixties. Loaning money by others than warehousemen was rather unsafe and was evidentally not done to any extent.

[4] Illustrations: in the *Daily Pioneer and Democrat* (St Paul), July 8, 1859, a s, f and c merchant advertised as representing the Galena, Dunleith, Dubuque and Minnesota Packet Co.; in the *Rochester Republican*, March 2, 1862, W. H. Robinson of Wabasha advertised as agent of the Milwaukee and Prairie du Chien and the Illinois Central Railroads and of the Minnesota Packet Co.; the *Pioneer and Democrat*, Jan. 7, 1862, had an advertisement of an agent of the Port Byron Extra White Line, Grand Trunk of Canada and Illinois Central, and another offered to arrange shipments to England. For one case see *13 Minn.*, p. 98.

As the market developed, regular wheat buyers became more important in the middleman system of the river towns The earliest buyers were general merchants or lumber dealers who exchanged their wares for wheat and who later bought the grain for cash Other buyers were storage, forwarding and commission men who at times also bought wheat Some packet agents conducted an independent grain business There were, further, many who made a regular business of buying grain, some on a rather large scale and others merely as scalpers who bought from the farmers and sold to the larger local dealers In the years 1866 and 1867 a new factor became prominent in the river trade—the wheat operator with headquarters in one town who bought in a number of towns and transported his grain on packets which he owned or controlled [1] The first warehouseman of a primary market to participate in the local wheat trade seems to have been Angus Smith of Milwaukee, who entered the river trade in Minnesota soon after the middle sixties [2]

Of the large local wheat operators the most prominent were Commodore Davidson of St Paul, John Robson of Winona and Joseph Reynolds of McGregor The first of these controlled the packet system on the Minnesota River and was a dominating figure on the upper Mississippi [3] He

[1] There were not many large wheat dealers John Robson and John Boalt, who had headquarters at Winona, paid income taxes on $60,000 and $52,000, respectively, in 1866 The other forty-one men in Winona County who were making over $1,000 a year paid a tax on a total of $112,000 Throughout the whole section east and south of the Mississippi and the Minnesota, the incomes of wheat dealers, with the exception of the two above, were moderate *Cf* report of the internal revenue collector, *St Paul Weekly Pioneer*, July 5, 1867, p 5 According to the *Hastings Gazette*, June 6, 1868, John Robson and John Boalt, with incomes of $42,000 and $41,000 in 1867, were the largest wheat operators in the state.

[2] *Report, Milwaukee Chamber of Commerce*, 1869, pp 18 and 52, 1872, p 69 and 1892, p 17

[3] *Cf infra*, p 41

never bought wheat on the Mississippi, but he was said to control the wheat trade on the Minnesota[1] John Robson had risen to a high position in the grain trade of McGregor, an older wheat market in Iowa With the capital and experience gained there, he came to Winona, and he soon became the largest wheat dealer in the state He owned packets, the Red Line, which carried his grain to railroad points farther south[2] Joseph Reynolds, "Diamond Jo", started his career on the river in the early sixties By 1867 he owned a small boat and a barge for carrying the wheat he bought[3] In the strength of these dealers is found the beginning of large-scale business in Minnesota's wheat trade with its attendants, efficiency and monopoly

On the whole, the river towns offered competitive markets A basic factor supporting competition was the large amount of wheat handled In 1860 Winona, Hastings and Red Wing shipped 1,000,000, 600,000 and 350,000 bushels, respectively[4] The shipments of seven river towns in 1866 ranged from 300,000 to 2,500,000 bushels[5] Another important factor was the independence of local middlemen of those in primary markets[6] In the early years of the river trade, agents of firms in primary markets rarely appeared in Minnesota[7] The local grain men were financed by loans

[1] *St Paul Weekly Press*, Feb 15, 1866, pp 2 and 4

[2] *St Paul Weekly Pioneer*, July 5, 1867, p 5, Shippee, L B, "Steamboating on the Mississippi," *Miss Vall Hist Rev* (March, 1920), vol vi, p 407

[3] Merrick, G B, *Old Times on the Mississippi* (Cleveland, 1909), p 249, Merrick, "Joseph Reynolds and the Diamond Jo Line," *Miss Vall Hist Ass Proc*, 1914-15, *passim*, *Commercial West*, July 20, 1901, p 17

[4] Com of Statistics, *Minn Its Place among States*, 1860-61, p 92

[5] *Winona Daily Republican*, June 18, 1867, p 2

[6] "The primary grain markets are those railway centers into which the grain of surplus states is concentrated in the first stage of its movement after leaving the producer" (*Report, Industrial Commission*, vol. vi, p 45)

[7] So rarely as to cause special comment in the newspapers

which they secured in the East, by local banks and by capital which they had themselves accumulated in some other trade or in the grain business.[1] Not until the middle sixties were any local dealers influential enough to have much control over the middlemen in the river towns The large number of local wheat men and the lack of uniformity in their interests and activities made combination difficult Frequently, prices in the larger river markets were higher than was justified by the prices in primary markets plus the cost of reaching those points Occasional mention in newspapers of attempted agreements suggests that such agreements were made when competition raised the price to an unprofitable figure Attempts to control prices did not, however, succeed in keeping them down very long[2]

The rivalry of the towns, which tried to increase their trade at each other's expense, maintained competition on the river The farmers generally sold their wheat in the nearest town, but they would go to another if they learned that its prices were better The competition of river towns for grain in the interior is shown by advertisements in inland newspapers Grain men of Winona, Minneiska, Wabasha and Lake City regularly advertised in the *Rochester Republican* in the early sixties, likewise, McGregor, La Crosse and Winona tried to secure trade from the territory around Preston by advertising in the *Preston Republican.*

A characteristic feature of the wheat trade in the river

[1] Early business men of the river towns have emphasized, in conversation with the writer, these sources of capital and credit

[2] The following quotation from the *Winona Daily Republican,* June 10, 1863, p 3 is typical "The price of wheat was fixed this morning by a sort of understanding among dealers at 1 02 for No 1, which figures are within 14 @ 15 cents of Milwaukee prices, and 5 @ 6 cents higher than is paid at other river towns, but the arrangement held good for only a short time when bids of a half cent and one cent were made above the established rate, and finally all 'caved in'"

period was the absence of supervision of its methods by agencies not directly concerned in the wheat business The system did not work to the satisfaction of everyone, for there was much criticism of wheat middlemen, but no means of correcting irregularities had been developed Since wheat was generally sold according to the quality of each load, there was not much quibbling over grades Complaints about weighing were, however, frequently heard Though dishonest weighing was perhaps not so common as the farmers believed it to be, there was enough to create a problem in the market Such dishonesty is illustrated by the methods of a Hastings wheat buyer, who instructed his assistant to subtract 3 bushels from the weight of each load [1] Newspapers of one town often accused the grain buyers of rival towns of dishonesty A La Crosse paper said of McGregor that "the place is infested with wheat thieves who cheat and steal at every opportunity".[2] If the buyers of one town paid a higher price than those of another, the former were accused of retrieving their loss by short weighing [3] Such practices were possible at the time, for the farmers had no scales, there were no public scales, and public inspection of weights and measures was unknown

The earliest attempts to eradicate dishonesty came from within the towns themselves and arose from their desire to secure trade by establishing a good reputation Boards of trade were organized to make rules for trading, and public weighing was tried [4] Following the example of McGregor,

[1] As related by the assistant to a keen-minded and highly respected man who marketed his wheat in Hastings in the sixties The latter told this story to the writer as an illustration of the way farmers were cheated in weight

[2] *Winona Daily Republican*, Oct 17, 1863, p 3, quoting the *La Crosse Democrat*

[3] *Ibid*, Oct 17, 1863, p 3 and Dec 3, p 3, *Goodhue County Republican*, June 20, 1862, p 2

[4] The St Paul Board of Trade was the only early one that survived.

the city council of Winona passed an ordinance in 1862 providing for a public market, in which all grain should be sold, and for the appointment of a public weighmaster.[1] This arrangement was not effective, for the ordinance was enforced but a short time, if at all.[2] The first attempt on the part of any agency outside of the towns to interfere in the grain trade was made in 1867, when a bill was introduced in the state legislature "to prevent fraud in inspection, weighing and transportation of grain."[3]

The river-town buyers followed St. Louis, Milwaukee and Chicago prices and sold their grain in these markets, which were at the time becoming important factors in the western wheat trade. The existence of such rival middleman groups was of great significance, for the influence of their rivalry was felt in the grain trade and was continually recognized in the wheat market.

St. Louis and Milwaukee were the principal primary markets for Minnesota's wheat before the Civil War.[4] The former was an important milling center. Its trade with Minnesota was interrupted for a short time during the war and never regained its former strength because of the competition of Milwaukee and Chicago, which increased when improved railroad transportation was secured to these cities.[5] St. Louis then took a position which it maintained for several years by championing Minnesota in its struggle with railroads and with markets at the lake ports. In the winter

[1] *Winona Daily Republican*, Oct. 5, 1862, p. 3.

[2] *Ibid.*, Dec. 3, 1863, p. 3.

[3] *Minn. House Jour.*, 1867, p. 210.

[4] *Winona Republican*, June 13, 1860, p. 1.

[5] For about a year following April, 1862, the *St. Paul Pioneer and Democrat* carried no St. Louis market reports. *Report, St. Louis Union Merchants' Exchange*, 1866, p. 36; *Report, Sel. Com. on Transp. Routes to Seaboard*, 43rd Cong., 1st Sess., *Senate Reports*, no. 307, vol. i, app., pp. 37 and 59; *Winona Daily Republican*, April 1, 1862, p. 2.

of 1867, $50,000 were appropriated by St Louis for paying the expenses of a convention to consider navigation on the Mississippi [1] But the efforts of St Louis failed to prevent the greater part of the wheat of the Northwest from going directly eastward [2] Milwaukee was the leading market for Minnesota wheat throughout the whole river period [3] It was the nearest transfer point to the boats on the Great Lakes by which practically all the grain sent eastward throughout the sixties was shipped Minnesota grain dealers felt that Milwaukee could give more recognition than any other market to the superior quality of their spring wheat Milwaukee prices for the grade of wheat raised in Minnesota were a trifle higher than those offered by Chicago [4] The difference was so small that the slightest fall in Chicago terminal charges or transportation rates might deprive Milwaukee of the lead Chicago began in the early sixties to contest the position of Milwaukee and to bid for Minnesota's wheat [5] The Chicago Board of Trade, the Milwaukee Chamber of Commerce and the transportation lines to the two cities were the principals in an intensive competition. As early as 1863 the river towns were conscious of the rivalry of those cities, as is indicated by the following note in the market reports of a river-town newspaper

[1] Hastings, alone, sent six delegates at the expense of St Louis, according to the *Hastings Gazette*, Jan 26, 1867, p 1

[2] *Report, Sel Com, op cit, St Paul Weekly Press*, March 8, 1866, p 2, *Minnesota Monthly* (1869), vol 1, p 176

[3] Hill, "Hist of Agric in Minn," *Minn Hist Soc Coll*, vol viii, p 276, *Winona Daily Republican*, June 16, 1863, p 3, *13 Minn*, p 98 The market value of Minnesota wheat was regulated and governed by the Milwaukee price, according to *11 Minn*, p 192

[4] *Report, Milwaukee C C*, 1897, p 79 and *Report, Chicago B T*, 1859, p 19, 1860, p 21, 1861, p 21, 1869, p 34 Also, Milwaukee Club and Chicago Spring as quoted in market reports of the *New York Journal of Commerce* and the *New York Evening Post*

[5] *Winona Republican*, June 13, 1860, p. 1, Aug 22, 1860, p 3 and June 16, 1863, p 3

The market for wheat is still excited and brisk competition is maintained One would suppose that the railroads and the interests of Chicago and Milwaukee were brought in competition, as the wheat purchased by one class of buyers is sent forward to Chicago via the Illinois Central and the other purchases are mostly sent to Milwaukee, via the La Crosse road The farmers enjoy the fun and also the business men outside of the grain trade [1]

Even though the river-town buyers tried to follow prices in primary markets, the approximation of local prices to those in central markets was not close This condition is illustrated by the following table, which gives, season by season, the amount by which the Milwaukee price exceeded that of Winona

EXCESS OF MILWAUKEE PRICE ABOVE WINONA PRICE PER BUSHEL No 1 SPRING WHEAT, FALL, WINTER, SUMMER, 1858-1867 [2]

In cents

Year	*Fall*	*Winter*	*Summer*
1858–1859	17 4	42 0	27 0
1859–1860	22 6	12 4	2 1
1860–1861	17 5	19 7	23 0
1861–1862	15 0	14 5	23 7
1862–1863	20 6	25 4	15 5
1863–1864	24 2	27 4	33 5
1864–1865	37 4	37 0	29 4
1865–1866	20 7	30 6	24 1
1866–1867	54 3	59 2	35 5

The table shows that the difference between local and Milwaukee prices varied greatly from season to season and

[1] *Winona Daily Republican*, May 21, 1863, p 3

[2] *Cf. supra*, p 28, note 2 for explanation of seasons and Winona prices Similar averages were calculated from Milwaukee prices in *Report, Milwaukee C. C.*, 1897, p. 89.

from year to year This crude approximation of local to primary prices is explained by a number of factors The local buyers did not secure sufficiently reliable market information to enable them to follow transactions in the larger markets Though the river towns secured telegraph connections with other markets in 1860 and 1861, much of the information received was so unreliable as to have doubtful value [1] Further, many river-town wheat buyers were too new and unskilled in the business to be able to use the information which could be secured Lack of understanding of the system of grading used in the different primary markets caused some buyers difficulty in following market prices [2] The instability and lack of uniformity in federal currency and in local bank issues were also of importance Local prices were influenced by local storage conditions and by the availability of capital with which to buy wheat Since the river-town buyers did not hedge their wheat, they were forced to buy on large margins, especially when the river was frozen so that grain could not be shipped [3] At all times local prices were affected by the irregularity of river transportation and by the fluctuation of rates The transportation system which brought wheat from the river towns to the primary markets was very unsatisfactory. Before 1867 Minnesota had no rail connections with exterior points [4] The river carried its products to St Louis and to the Mississippi railheads of roads leading to Milwaukee and Chi-

[1] *Goodhue County Republican*, April 6, 1860, p 3 and June 14, 1861, p 3, *Winona Daily Republican*, Dec. 18, 1861, p 3. *Cf* Boyle, *Spec and the Chicago B T*, pp 96-97

[2] Grading by weight was adopted by the Chicago B T in 1858 *Report, Chicago B T.*, 1858, pp 11, 12, 15 and 16 For other markets see *Report, Ill Rail and W'house Com*, 1874, p 33. Irregularities of inspection impaired the value of this system

[3] C M Harrington in *Commercial West*, March 30, 1901, p 10

[4] *Report of the Wisconsin Railroad Commissioner*, 1874, pt III, p 94, Mitchell, W H, *History of Steele County* (Minneapolis, 1868), p 20

cago Transportation, both by river and by rail, was slow, unreliable and expensive.

The river was in some respects an unsatisfactory highway Since it was closed a large part of the year, certain problems in the storage, sale and shipment of grain arose,[1] but irregularities in the navigation of the river due to low water in the open season were even more serious because unexpected For several weeks in the fall of 1860 it was practically impossible for boats to use the river The same condition existed in 1861. In 1863 navigation was suspended for a considerable part of the season, and during the following summer the river was low Because of recurring seasons of low water, the need of more regular transportation was evident [2] It was even said of the Mississippi that "at this rate it might as well dry up and then the people would look elsewhere for a thoroughfare to do the business of freighting and carrying".[3]

Wheat was transported on the river by large packets and barges, which carried the grain in sacks or in bulk The packets were of two kinds. the lines which ran on a regular schedule and had agents in the towns, and the "wild" boats which sought trade from town to town and bargained for freight

The history of the packets tells of a change from competition to agreement or consolidation. In the early years intense rivalry existed between the different lines and "wild" boats. But the railroads from Chicago and Milwaukee to

[1] The river was closed an average of 142 days a year from 1850 to 1867, according to figures in the *St Paul Weekly Press*, April 9, 1868, p 7

[2] *Goodhue County Republican*, Sept 7, 1863, p 3, *Winona Daily Republican*, Nov 27, 1861, p. 3, June 2, 1863, p 3 and July 3, 1863, p. 3; Shatzel, "Wheat Fields of Minnesota," *Harpers*, (1868), vol xxvi, p 192, *13 Minn*, p 95

[3] *Winona Daily Republican*, July 7, 1863, p 3 This article noted that wheat buyers were taking high margins because of low water.

the Mississippi tended to destroy that competition because of their power in dictating the terms on which they would receive freight from the boats In the fifties the Galena, Dubuque, Dunleith and Minnesota Packet Company, known as the Galena Line, had an arrangement with the Milwaukee and La Crosse Railroad whereby it had almost complete control of the trade on the river to and from La Crosse.[1] In 1859 the railroad broke its relations with the Galena Line and delivered its traffic to Commodore Davidson's St Paul and La Crosse Line This step was followed by a series of "rate wars" between the two packet lines, which finally ended when Davidson gained an interest in the opposing line and thus became practically a dictator on the upper river [2] The only competition that he met was from a part of the old Galena, which continued separately as the Northwestern Line and made arrangements to handle the traffic of the Illinois Central and the Milwaukee and Prairie du Chien railroads, competitors of the Milwaukee and La Crosse [3] But their rivalry did not long continue For the seasons of 1864 and 1865 the La Crosse and St Paul and the Northwestern abandoned competition and pooled their incomes, and the following spring they united to form the Northwestern Union Packet Company [4]

By May, 1866, the only important lines operating on the upper Mississippi were the Northern Line Packet Company

[1] Shippee, "Steamboating on the Mississippi," *Miss Vall Hist Rev*, vol vi, p 471

[2] *Ibid.*, Blakeley, Russell, "Advent of Commerce in Minnesota," *Minn Hist Soc. Coll*, vol viii, p 409, Neill, E D, and Williams, J F., *History of Ramsey County* (Minneapolis, 1881), p 336

[3] *Goodhue County Republican*, Nov 23, 1863, p 3, *Winona Daily Republican*, Nov 23, 1863, p 3, Shippee, *op cit*, p 493, Merrick, "Joseph Reynolds and the Diamond Jo Line" *Miss Vall Hist Assoc Proc*, 1914-15, p. 227

[4] *St Paul Weekly Press*, Feb 15 and May 10, 1866 advertisements announcing change. *Cf* Merrick, *op cit* and Shippee, *op cit.*

of St Louis and the new Northwestern Union, which controlled practically all the freight that was sent from Minnesota to Milwaukee or Chicago [1]

The power of the packets on the upper river was determined largely by their relations with the railroads from the Mississippi to Lake Michigan Agreements concerning the terms on which freight would be received from each other were made by the railroads and packets, all competing for traffic A road having an agreement with a line of packets would not accept freight from other boats, in return, these packets were expected to deliver all their freight to the road According to some agreements, railroads might receive freight from other boats by demanding an extra charge of them or by granting a drawback to the packet line with which it was working [2] In other words, a railroad and a line of packets might thus attempt to control the freight between the upper river and Lake Michigan. Boats or railroads which did not have such agreements found it impossible to exist under this system

The consolidation of the packets has been noted, a similar development was taking place in the organization of the railroads from the Mississippi to Milwaukee and Chicago. The roads carrying the greater part of Minnesota's wheat were the Milwaukee and La Crosse, the Milwaukee and Prairie du Chien, the Illinois Central and the Chicago and

[1] *St Paul Weekly Press,* Dec. 20, 1866, p 3, Neill and Williams, *Hist of Ramsey County,* pp 336-337

[2] An illustration is found in the *Winona Republican,* April 12, 1864, p 2 "Grain will not be received from any boats outside of those [packet] lines [by the Mil and La Crosse, Mil and Prairie du Chien and Ill Central] except by an extra charge of five cents per bushel over those roads" Also, Merk, Frederick, *Economic History of Wisconsin during the Civil War Decade* (Madison, 1916), p 313 Newspapers in the state claimed that stock in the packets was owned by the railroads. The writer was told by a very prominent river man that such relationships were supposed to exist but that no one had been able to get evidence proving it

Galena Union, which became the Chicago and Northwestern in 1864 [1]

The two Milwaukee roads were the heaviest carriers of Minnesota products in the river period Their importance was largely determined by the fact that they provided, together with the river, the shortest routes from Minnesota to Milwaukee, a leading spring-wheat market and grain-shipping point on Lake Michigan The competitive position which the two roads occupied in relation to each other made agreements between them almost imperative After a number of temporary understandings, the final consolidation of the two roads in 1866 established a permanent unity of policy [2] As a result they became even more powerful than they had previously been Their alliance with the Northwestern Union Packet Company made a combination which practically dominated the traffic from Minnesota to Lake Michigan

Neither Chicago nor its railroads could afford to lose the upper river trade Therefore the roads from Chicago to the Mississippi gradually changed their policy of competition The Illinois Central, which had held a strong position in the earlier years of the river trade, was practically eliminated from the traffic by the Milwaukee-Davidson combination In 1864 the Galena and Chicago Union and the Northwestern consolidated to meet the opposition of the Milwaukee roads [3] This combination made the Chicago and Northwestern, as the new organization was called, strong enough to dominate the Mississippi-Chicago trade and to assume a respectable position in regard to the river trade [4]

[1] The first two became the Chicago, Milwaukee and St Paul.

[2] *Report, Wis Rail Com*, 1874, pt ii, p 93

[3] *Report of the Chicago and Northwestern Railway*, 1865, p 7, *Report, Wis. Rail Com*, 1874, pt i., p 150

[4] *Report, Chicago and N'western Railway*, 1865, p 34 The Illinois Central had to use the Northwestern to reach Chicago

The Northwestern was strengthened by a number of later acquisitions, which also brought it new problems In 1865 it secured the majority of the stock of a road from Chicago to Milwaukee [1] It reached into Minnesota in 1867 by securing the Winona and St Peter, a road which tapped a rich wheat section [2] But the eastern terminal of this road in Minnesota had for several years no rail connections with the Chicago and Northwestern in Illinois Therefore the Northwestern was forced to rely on the river to connect its Minnesota terminal at Winona on the Mississippi with its river railhead at Fulton, Illinois

Since the river traffic was so largely controlled by the Northwestern Union (Davidson's line), the Northwestern Railroad championed the smaller packets. Joseph Reynolds, up to that time a small figure on the river, was given exclusive privileges in the carrying trade at places on the river controlled by the Northwestern road and special privileges at Fulton for his wheat trade from other points His Chicago, Fulton and River Line was organized in 1868 [3] Robson's Red Line, which was organized in 1867, was also befriended by the Northwestern Railroad [4] Competition was thus again restored on the river By this time, however, the dominant position of the river in Minnesota's wheat trade was disappearing with the advance of railroads

Had the Milwaukee-Mississippi combination not been opposed, Minnesota's wheat industry might have suffered. Already the roads were controlling storage and were domi-

[1] *Report, Chicago and N'western Railway*, 1865, pp 36-37

[2] *Ibid*, 1868, p 9

[3] Merrick, "Joseph Reynolds and the Diamond Jo Line," *Miss Vall. Hist Assoc Proc*, 1914-15, p 229

[4] *Cf* Shippee, "Steamboating on the Mississippi," *Miss Vall Hist. Rev*, vol vi, p 489, John Robson had boats for his wheat trade in 1866, according to the *Winona Daily Republican*, June 20, 1866, p 2.

nant in the trade of Milwaukee[1] A potential monopoly was created on the river and in the local wheat trade by the Davidson system of packets The growing power of Chicago and of the Northwestern Railroad broke the strength of Milwaukee At the same time it introduced undesirable elements into the wheat market in Minnesota

The relations of railroads and packets, their combination and competition, were directly important to the wheat trade only in so far as they affected rates The importance of rates in the river-town trade is emphasized by the regular comments on the condition of the river and on freight charges in newspaper market reports Low rates do not necessarily mean continued high prices for produce Persistent low rates may eventually lower prices, other factors remaining constant But in the wheat trade, which is an inter-metropolitan trade, rate conditions in one locality do not necessarily affect the price in the determining market Any individual locality, however, which has adverse rate conditions finds the value of its products reduced accordingly Furthermore, regardless of whether the price in the central market is high or low, a high transportation rate is relatively more disadvantageous to a locality far from the market than to one near Instability of rates is also significant, for it increases the speculative features of the trade In the river period the rates on Minnesota wheat shipped to primary markets were marked by large fluctuations with a definite upward movement of charges

In the earlier years there was considerable bargaining as to rates, especially on the part of the "wild" boats By 1860 rate schedules were made by the season and changes were announced from time to time[2] Even then, schedules

[1] *Cf* *Wisconsin General Laws*, 1864, ch 390 for an attempt to curb the power of the railroads

[2] Illustration *Daily Pioneer and Democrat*, Nov 11, 1859, p 3

did not apply to all alike, for discriminations were made in favor of certain shippers. "Through" rates were about the same to both Chicago and Milwaukee[1] The railroad lines agreed with the packets on charges and on the basis for dividing receipts From the very first the Milwaukee roads to La Crosse and Prairie du Chien took two thirds of the through charges, the Illinois Central received 60 per cent and the Western Union to Savanna 50 per cent of the "through" rate from Minnesota.[2]

Rates were, on the whole, very satisfactory during the first few years of Minnesota's wheat trade. In 1859 the charge on a bushel of wheat shipped to Chicago or Milwaukee was 15 cents and the rate to St. Louis was 10.[3] In the fall of that year the packet war between the St Paul and La Crosse and the Galena lowered the charge to 4 cents from any place above La Crosse to Chicago and Milwaukee[4] There were also short wars in 1861 and 1862, but the regular rates from any place on the river to these cities ranged from 12 to 15 cents[5]

By 1864 the rates had risen considerably Sixteen cents a bushel was charged for carrying wheat to St Louis, while the rate to Lake Michigan was 25 cents[6] The latter brought forth the first general complaint of rates in Minnesota. A convention was held at Red Wing to take steps toward effecting a reduction of charges The meeting was called by

[1] *Winona Republican*, May 23, 1860, p 3

[2] Figures obtained from Captain Fred A Bill of St Paul, a recognized authority on the early river traffic

[3] *Winona Republican*, March 21, 1860, p 3, Com of Statistics, *Minn. Its Place among States*, 1859, p 1.

[4] Blakeley, "Advent of Commerce in Minn," *Minn Hist Soc. Coll*, vol viii, p 409

[5] *Ibid*; *Goodhue County Republican*, Oct 25, 1861, p 3, *Pioneer and Democrat*, Oct 14, 1860, p 1, Merk, *Ec Hist. of Wis During Civil War Decade*, p 316.

[6] *Winona Daily Republican*, April 12, 1864, p 2.

business men of Hastings, who had met and passed a resolution stating that it was necessary to take measures in opposition to the combination of certain transportation companies which had established exorbitant rates on freight from all points on the Mississippi above La Crosse to Milwaukee and Chicago[1] A committee was elected by the convention to go to Chicago and Milwaukee to seek relief.[2] The Chicago Board of Trade and the *Chicago Tribune* agreed that rates were too high "To charge twenty-five cents for freight upon a bushel of wheat from Winona to Milwaukee or Chicago is unmitigated extortion", said the latter[3]

Protests were futile, rates continued to rise In the spring of 1865 the rate on a bushel of wheat to St Louis was 18 cents, and a barrel of flour could be sent via New Orleans to New York for $1 75 At the same time the charge on wheat to Chicago or Milwaukee was 35 cents, and the rate on flour to New York was $3 by way of the lake ports But in the autumn of 1865 the rate to Lake Michigan via La Crosse was reduced to 28 cents The following spring it was down to 19 cents from St Paul and 18 cents from Winona, but by fall it had risen again to 28 cents[4]

The high rates in the fall of 1865 and the winter of 1866 were the pretext for, and to a certain extent the cause of, an anti-monopoly convention which was held in St Paul early in 1866[5] The description of that meeting, by a contemporary newspaper, as the largest delegate convention ever held

[1] *Winona Daily Republican*, Feb 12, 1864, p 3

[2] *Ibid*, April 12 and 18, 1864, p 2

[3] *Ibid.*, April 12, 1864, p. 2

[4] *Ibid*, June 6, 1865, p 2, *St Paul Weekly Press*, March 29, 1866, p 2, *Winona Daily Republican*, Jan 12, 1867, p 1, *13 Minn*, p 98 For a short distance on the Minnesota River to St Paul the rate was 17 13 cents in 1865 (*ibid*).

[5] An excellent account of the convention is given in Shippee, *op cit*

in the state gives an idea of its importance[1] Two specific charges were brought against the packets and the railroads of Wisconsin and Illinois first, their rates were exorbitant, and, second, the monopolistic position they occupied as carriers gave them potential control of the wheat trade[2] It was said that "their control of transportation and freight rates will enable them, whenever the exigency requires it, to outbid an independent buyer and, when they shall have driven all competition out of the field, to fix prices of wheat to suit the suggestions of their own capacity"[3] The high rates were attributed to agreements of railroads and packets, which resulted in monopoly on the river[4]

Various proposals were made for attacking the so-called monopoly A number of river-town business men tried to assist in the organization of a rival packet company, but the enterprise did not materialize[5] The use of rival routes was again favorably discussed, and proposals were made for the encouragement of shipping down the river[6] The Lake St Croix and Superior and the Wisconsin and Fox canals were again considered, as was the possibility of securing rail connections with Lake Superior[7] The Minnesota Legislature sent a memorial to the Wisconsin Assembly asking that it "so alter, change, or fix by law the tariff of freights on Rail Roads running through your State that no more than a just and reasonable charge can be recovered on goods or

[1] *St Paul Weekly Press*, Feb 15, 1866, p 2

[2] *St Paul Weekly Press*, Jan 18, 1866, pp 2 and 5, and Feb 15, pp. 2 and 4

[3] *Ibid*, Jan 18, 1866, pp 2 and 5.

[4] *Cf supra*, pp 40-45

[5] *St Paul Weekly Press*, March 1, 1866, p 8 and March 29, 1866, p 2.

[6] The St Louis river convention of 1867 was in answer to this. *Cf. supra*, pp 36-37.

[7] *Prairie Farmer*, Feb 19, 1866, *St Paul Weekly Press*, Jan 4, 1866, p 1.

grain shipped to or from our State"[1] This memorial expressed the theory concerning the power of the state in relation to railroads which became the basis of Granger legislation

Nothing definite was accomplished by the anti-monopoly agitation of 1866 The movement failed, it was said, because of the lack of proper leadership Its failure was in part due to the rivalry of towns and sections of the state which so long prevented any successful action from being taken in regard to transportation problems Winona and its neighbors were afraid of St Paul[2]

To determine the extent to which complaints of high rates properly allocated the cause is impossible There were several factors which would have made rates high under normal competitive conditions The seasons of low water in the early sixties made navigation of the river more difficult and expensive Certain elements in the situation which were largely incidental to the war between the North and the South were significant The depreciation of the currency beginning in 1862 and the rise in the general price level were especially important The rise in wages and in prices of material increased the cost of operating packets and railroads[3] The number of boats on the river did not increase with the enormous expansion of traffic, for fewer boats were built and some were withdrawn for government service.[4] Such changes would undoubtedly have raised the rates considerably even with the strongest competition; but whether the rates could then have reached so high a level may be questioned

[1] *St Paul Weekly Press*, Feb 15, 1866, pp 2 and 4 A facsimile of original memorial is found in Merk, *op cit*, opposite p 332

[2] *Winona Daily Republican*, Dec 11, 1867, p 2

[3] The *Winona Daily Republican*, Oct 27, 1862, p 3 noted that wages of deck hands had been raised from $30 to $60 a month.

[4] *St Paul Press*, March 8, 1863, p 3, *Winona Republican*, April 8, 1864, p. 2.

Comparison of competitive rates on the Great Lakes with the Minnesota-to-Lake-Michigan rates reveals a striking difference While the lake-canal-river charge per bushel of wheat from Chicago to New York rose from 24 83 to 26 62 cents, the rates from Minnesota to Chicago and Milwaukee increased from about 9 to 35 cents [1] In 1866 the charge from Winona to Chicago was 35 per cent greater than that from Chicago to New York, which was almost four times the former distance [2] Since the cost conditions under which the two were operating were essentially the same, the great increase in rates to Lake Michigan, relative to those eastward on the lakes, finds at least a partial explanation in the weakness of competition in the case of the former [3]

From Chicago and Milwaukee to New York the rates, though high, were, on the whole, much lower than from Minnesota to Chicago and Milwaukee. The rates by water increased until the peak was reached in 1867 The tariff on a bushel of wheat shipped by lake and canal from Chicago to New York was 17.03 cents in 1858, and in 1867, 29 61 cents [4] Grain was not shipped eastward in winter when the water routes were closed but was stored in western markets until spring [5]

Terminal and transfer charges added considerably to

[1] *Cf supra*, pp 46-47, *Report of the New York Produce Exchange*, 1890-91, p 72

[2] *Com and Fin Chronicle* (1869), vol viii, p 584

[3] *Cf* Merk, *op cit*, p 313 Contemporary statements illustrated by *Winona Republican*, June 22, 1863, p 3, and *St Paul Weekly Press*, Feb 15, 1866, pp 2 and 4, and May 10 p 2 Davidson's admission that his line made a profit of $100,000 a year was convincing evidence to his enemies

[4] *Report, N Y Prod. Exch*, 1890-91, p 9 There was no all-rail shipping from Chicago to N Y. at that time

[5] Letter written by the general manager of the Milwaukee road quoted in *Goodhue County Republican*, Dec. 2, 1875, p. 2

marketing costs Wheat was almost never sold directly to eastern buyers, so there were commissions to be paid at Milwaukee or Chicago and at Buffalo Storage was charged at these places — a charge which exacted a heavy toll in money, weight and grade, because of the cliques of grain men [1] Wheat shipped from Minnesota to New York was transferred several times at a considerable cost Boats and cars were loaded and unloaded without the assistance of the mechanical devices later invented Of a cost of 52 cents in shipping a bushel of wheat from the Mississippi to New York in 1869, the actual freight charge was 34 cents, tolls on the Erie Canal were 6 cents, lake insurance was 1¼ cents and the remainder, 11 cents, consisted of commission, storage and inspection charges at Chicago, Buffalo and New York [2]

To estimate the relative importance of the various costs is impossible, because many were so intangible and because variations from place to place were so considerable The cost which received the most attention in Minnesota and elsewhere at that time was the transportation charge A comparison can be made which illustrates the relative importance of freight charges in determining the difference in prices at the various related markets The table below indicates the situation between Winona and Milwaukee and between Milwaukee and New York, the three most important markets in the eastward movement of Minnesota wheat in the river period

[1] *Report of the Industrial Commission*, vol vi, p 470, Boyle, *Speculation and the Chicago Board of Trade*, pp 99-100, *Wis Gen Laws*, 1864, ch 390

[2] *Com. and Fin Chronicle* (1869), vol viii, p 584, *Hunts' Merchants Magazine and Commercial Review* (1869), vol lx, pp 336-337, *Winona Republican*, Sept. 15, 1865, p 3

THE FREIGHT CHARGE AS A FACTOR IN DETERMINING THE DIFFERENCE IN WHEAT PRICES AT WINONA, MILWAUKEE, NEW YORK, MAY, 1859–1867 [1]

In cents a bushel No 1 Spring

	Excess of Milwaukee above Winona price	*Freight, Winona to Milwaukee*	*Excess of New York above Milwaukee price*	*Freight, Milwaukee to New York*
1859 ...	65 1	13 5	–1 0	14 7
1860 .	24 2	9 0	22 0	17 8
1861 .	29 7	13 5	34 2	21 1
1862	15 2	13 5	18 0	19 6
1863 . .	27 9	25 0	19 0	15 7
1864	–17 0	25 0	39 4	14 4
1865 .	–19 7	35 0	19 7	16 2
1866 .	40 7	18 0	26 5	19 3
1867	87 1	36 0	12 0	13 0

This table shows that transportation was the strongest single factor in determining the difference between Milwaukee and New York prices; the excess of Milwaukee prices above those at Winona was, on the other hand, by no means so sensitive to freight charges Costs other than carrying charges were relatively much more significant in the latter than in the former case Though it cannot be specifically demonstrated, it appears that the excess of other costs over freight charges in the West was due to the existence of uncertainties and financial difficulties not found in the larger markets.

[1] The grade used was no 1 spring in Winona and Milwaukee Club at Milwaukee and New York For Winona prices see *supra*, p 28, note 2; Milwaukee prices from *Report Milwaukee C C*, 1897, p 89, New York prices from the *New York Journal of Commerce*, 1858-59, and *Evening Post*, 1860-61, market reports, and *Report, N Y. Prod Exch*, 1880, p 430 In every case the prices were for May, but the New York papers quoted Mil Club so seldom for 1858-61 that the figures for these years are, as a result, of uncertain value although the best obtainable The rates from Winona to Milwaukee are given on pages 46-47 and in *Winona Republican*, April 11, 1867, p 3; rates from Milwaukee to New York are the average May rates by lake-canal in *U S. Dept Agric, Div. Stat, Misc Series, Bul 15*, p. 51

The actual cost of marketing Minnesota's wheat is illustrated by a comparison of prices at Winona, Milwaukee and New York.

Price of No 1 Spring Wheat, Winona and Milwaukee Prices Expressed in Percentage of New York Price, 1858–1867[1]

	Percentage of New York Price		*New York Price*
	Winona	*Milwaukee*	
1858	61	75	$0 958
1859	55	80	1 161
1860	65	76	1 256
1861	50	65	1 217
1862	55	71	1 208
1863	66	81	1 368
1864	67	78	1 971
1865	58	76	1 690
1866	65	84	2 080
1867	75	90	2 410

The difference in prices in Minnesota and at the primary market, Milwaukee, and the export market, New York, was significant Winona, the best market in the state, paid in the earlier years little over half the seaboard price In the interior, prices were considerably less than at Winona The experience of one farmer illustrates concretely the problem of marketing costs. In 1866 he raised 1,500 bushels of wheat which were hauled to Red Wing, a distance of 20 miles, at a cost of 15 cents a bushel There the wheat was sold for 90 cents, while the New York price was then $1 87½. Hence the farmer actually received 75 cents a bushel for his wheat, exactly 40 per cent of its export value[2]

The great problem of the wheat industry in Minnesota was the reduction of marketing costs. The wastes of barter exchange and of unspecialized local middlemen, the difficulties in financing the trade, the absence of insurance by hedg-

[1] *Supra,* note on page 52

[2] *Goodhue County Republican,* Nov 1, 1866, p. 3

ing, the unreliability of market information, the inefficiency and high cost of transportation, and the frequent transfer and commission charges cut heavily into the value of the wheat as reflected from the central market to the producer High actual expected costs and heavy risks and uncertainties were found in the wheat trade everywhere at that time To the extent that such costs were general, they were not necessarily a burden to the producer But for the Minnesota farmers the costs were especially severe Those farmers were on the agricultural frontier far from markets, and they, therefore, had to carry relatively high transportation charges Furthermore, the inefficiencies and difficulties inherent in an undeveloped system, such as is found in new frontier communities, characterized their local wheat trade

CHAPTER III

New Roads to Market, 1867-1875

No factor was more important in determining the changes in the organization of Minnesota's wheat market than the developments in transportation which occurred immediately after the Civil War The whole marketing system was revolutionized by the extension of railroads, by modifications in rates and services and by the shifting of trade routes with a consequent change in primary markets

The extension of settlement and of wheat production in the late sixties and the early seventies made a change in the transportation system imperative In the early years the long haul to the river markets cut heavily into the profits of the wheat growers This situation was aggravated by the rush of settlers into the state in the late sixties The reason for their coming was confidently expressed in the old song of the immigrants

> Then come along, come along, don't be alarmed,
> For Minnesota's broad enough for each to have a farm [1]

The tilled area increased almost fourfold in the decade following the war [2] The growth in wheat production was even greater. The percentage of tilled area devoted to wheat culture, which had been 53 38 in 1860, increased to 61 86 in 1868 and to 66 26 by 1874 [3] This extension of wheat

[1] Mitchell, W H, *History of Dodge County* (Rochester, 1870), p 39

[2] *Report, Com of Statistics*, 1869, p 5 and 1880, p 35

[3] *Ibid*, 1876, p 22

farming augmented Minnesota's dependence on railroads as marketing agencies, for wheat more than any other agricultural product depended on a distant market To secure regular, rapid and cheap transportation from the wheat field to the central market became necessary

One of the most obvious needs was a local one Until 1867 the rivers provided the principal highways of the state and the Mississippi was the first link in the system connecting Minnesota's wheat trade with primary markets But at that time a change was occurring Railroad projects which had been started in the late fifties experienced a boom, resulting in the tracing of the main outline of the railroad system by 1873

Efforts had been made in territorial days to secure railroads. From 1853 to 1857 over twenty projects were chartered—all hopeful and pretentious, like the Louisiana and Minnesota and the Lake Superior, Puget Sound and Pacific The munificent congressional land grants and the optimistic five-million loan, promised the roads by the state, gave an impetus to railway building which resulted in the grading of over 238 miles in 1858 and 1859 These projects were practically abandoned, however, and in 1860 the state became the owner of the grants and franchises when the companies failed to fulfil their contracts [1]

A sounder economic basis for railroad building had appeared when work on the roads was resumed. In 1862 new grants were made.[2] Liberal inducements were offered to projected roads Within ten years the few roads in the state received congressional land grants equal to one fourth of the land area of the state Three million acres were actually deeded to the roads by 1871. In addition, munici-

[1] Folwell, W W., *A History of Minnesota* (St Paul, 1924), vol. ii, pp 37-58, *Report of the Minnesota Railroad Commissioner*, 1871, pp. 5-8.

[2] *Ibid.*, p 9

pal aid was given to the extent of $388,000 in the form of bonds[1] The various political units of the state assisted the roads throughout the whole period of railroad extension, thereby laying the basis for the feeling among the people that railroads were public property

The railroad system which was built was the result, in the main, of three influences the needs of existing communities for markets and goods, the desire of cities to the east for Minnesota's trade, and the work of those railroad pioneers who foresaw, through proper transportation facilities, the concentration of trade in the vicinity of Minneapolis and St Paul[2]

Most of the early railroad projects in the river period were sponsored by Mississippi towns, which had hopes of becoming emporiums of their section, and were subsidiary to the river In 1862 the St Paul and Pacific and the Winona and St. Peter were started. The former was put into operation during the same year from St Paul to St Anthony, a milling town incorporated with Minneapolis in 1872, and the first division was extended westward, reaching the Red River and the Minnesota boundary at Breckenridge in 1871 Another line of the same road was built to Sauk Rapids, which soon became an agricultural community[3] The St Paul and Pacific opened the richest wheat land of the state to settlement

[1] Folwell, *op cit*, pp 2, 41 and 50

[2] *The Minneapolis Tribune*, Jan 7, 1868, p 2, commenting on the proposed M and St. L Railroad said "Thus in time to come, New England will not exchange her cotton fabrics for our flour Here will be the cotton mills of the Mississippi Valley, and from hence will go out our flour in exchange for this great raw material—the South supply us and we them ..For teas and raw silks, and the productions of that ancient, still dreaming Asiatic world we will exchange our cotton fabrics, our yarns and woollens; while here, at our very doors, the song of the shuttle, and saw, and millstone, will mingle with the rush and roar of the travel of the nations of the earth"

[3] *Report, Minn Rail Com*, 1872, pp 7-11.

In the southern part of the state a number of roads were begun, which were built more directly in response to existing needs of agricultural communities The Winona and St Peter was originally a local project, meant to tap the newly settled area west from Winona It was built from that town westward, reaching Dakota Territory in 1872 The Southern Minnesota Railroad was laid almost parallel to the Winona and St Peter from Grand Crossing, opposite La Crosse, on the Mississippi It was built to Winnebago City from 1866 to 1873, when its construction was discontinued because of the panic The Hastings and Dakota, paralleling the Winona road on the north, was started in 1868 but was also discontinued because of the panic [1] These three lines made railroads fairly accessible to the farmers of the southern part of the state But only one, the Winona and St Peter, succeeded in reaching beyond the eastern half of the state before the panic of 1873, which was followed by a period of inactivity in railroad construction

Before 1867 the roads in operation in Minnesota depended on the river to connect them with the lines leading to Chicago and Milwaukee. During that year the Minnesota Central, which had been built southward from St Paul, met the McGregor and Western, a road connecting with the Milwaukee and St. Paul at Prairie du Chien, thus providing Minnesota's first rail connections with the country to the east and south [2] Another road was started from St Paul in 1869 and built along the west bank of the Mississippi to Winona in 1871 and to La Crescent, opposite La Crosse, the following year [3] The bridging of the river at La Crosse

[1] *Report, Minn Rail Com*, 1872, pp 11, 13 and 18

[2] *Ibid*, 1872, p 17; *Report of the Wisconsin Railroad Commissioner*, 1874, pt iii, p 94; Mitchell, W H, *History of Steele County* (Minneapolis, 1868), p 20, McClung, J W, *Minnesota as It Is in 1870* (St. Paul, 1870), p 133

[3] *Report, Minn Rail Com.*, 1872, p 9, *Report, Wis Rail Com.*, 1874, pt ii, p 91.

connected the Southern Minnesota and the river road with the Milwaukee and St Paul

The railroads of southern Minnesota soon came under the control of the Milwaukee and Chicago roads The Winona and St Peter was acquired by the Chicago and Northwestern in 1867, but it had no rail connections with the Northwestern for some time.[1] The plan to extend the Madison branch of the Northwestern westward was not completed before 1873, although a part of the route had been in use since 1871 and through services had been maintained by running on a section of the Milwaukee Railroad[2] The remaining railroads of the southern part of the state were consolidated with the Milwaukee and St Paul[3] The union of these roads placed the major part of Minnesota's trade in the hands of the Milwaukee line

In opposition to the control maintained by the railroads of Chicago and Milwaukee, a new route was secured eastward by way of Lake Superior This route had been considered promising for some time, but its construction was delayed by the rivalry of certain persons and localities, which prevented the granting of land to assist the road[4] In 1868 the building of the Lake Superior and Mississippi was begun, and within two years it was completed from St Paul to Duluth with branches to Stillwater and Minneapolis[5] This

[1] *Report, Chicago and N'western Railway*, 1868, p 9

[2] *Ibid*, 1872, p 12 and 1875, p 5, Poor, H V, *Manual of Railroads*, 1874-75, p 89, *Winona Weekly Republican*, Feb 29, 1870, p 3 and May 31, 1871, p 3, *Report, Milwaukee C C*, 1872, p 7

[3] *Report, Wis. Rail Com*, 1874, pt ii, pp 83, 91, 94 and 97, pt. iii, p 118

[4] Minneapolis and St. Paul newspapers for 1867 and 1868, message of Gov Alexander Ramsey to the legislature, *Minn Ex Docs*, 1860, p 2, message of Gov Swift, *Minn Ex Docs*, 1863, p 7, speech of Senator Ramsey, *Cong Globe*, 38th Cong, 1st Sess, pt 1, p 924

[5] *Report, Minn Rail Com*, 1872, pp 14-16, *ibid*, 1871, p 31 "The opening of the Lake Superior and Mississippi Railroad has been an era in the commerce of our state"

road received grain from the railroads tributary to St Paul and Minneapolis, from the Minnesota and Mississippi rivers at St Paul and from the St Croix at Stillwater Its value to the wheat trade along the roads of southern Minnesota was largely neutralized by the fact that rates to St Paul and to the Mississippi were made so high as to force the grain to go southeastward [1]

Another step significant for the wheat trade of the state was taken in the completion of the Northern Pacific from Duluth to Moorhead in 1871.[2] The Red River district, which was to become the richest wheat section in Minnesota, thus secured an outlet to Lake Superior

In the southwestern section the pioneer road was the St Paul and Sioux City Organized as the Minnesota Valley in 1864, it was gradually extended to St. James, where it connected in 1872 wtih a road already completed to Sioux City [3] This road was important to the wheat trade in that it supplied means of transportation to communities along the Minnesota River and opened to settlement parts of the southwestern section of the state which had no practicable means of transportation

A marked concentration of the railroads of this region in Minneapolis and St. Paul is noted With the exception of the Northern Pacific and the three parallel roads built westward from the Mississippi in the southern part of the state, every road built in Minnesota touched the Minneapolis and St. Paul area. An article in the *Minneapolis Tribune* in 1868 named the five gates of the city, saying that "Minneapolis is the acknowledged railroad center of the upper Mississippi and of the state" [4] One of the gates was the river, the others were railroads. A similar concentration had occurred in St Paul

[1] *Cf infra*, p 77

[2] *Report, Minn Rail. Com.*, 1872, p 19.

[3] *Ibid.*, pp. 13-14.

[4] *Minneapolis Tribune*, Jan. 7, 1868, p. 2

Thus within ten years the outline of Minnesota's railroad system had been made The southeastern section of the state had several roads, the northwest and the southwest had been reached by railroads In all, 2,329 miles of road had been built by 1873, the year which marks the end of the first boom period of Minnesota's railway history [1] In terms of trade, the building of railroads shortened the farmers' haul to market and opened more territory to agriculture Another significant feature of the new development was the introduction of more trade influences Relations with Chicago and Milwaukee were strengthened The influence of the Duluth-lake route and of Minneapolis and St Paul was established and became a strong factor in Minnesota's trade

Interest in railroad development was focused on the local situation, but changes were occurring in other places which were of great importance to the state New routes were being opened to the seaboard In the sixties eastern markets were reached by way of the river, gulf and ocean and by way of Milwaukee or Chicago and the lakes In the early seventies the old river route was no longer very important, a new lake route via Duluth rose to prominence, and railroads became strong competitors of the lakes as carriers from Chicago to New York and the East

During the late sixties there was open warfare between St Louis and New Orleans, on the one hand, and Chicago and Milwaukee, on the other [2] Minnesota, generally, and the river towns, in particular, favored the Mississippi in order to wring concessions from the lake cities and from the railroads leading to Lake Michigan After 1869 the river was not an actual competitor for a large share of the

[1] *Report, Minnesota Railroad and Warehouse Commission*, 1905, p 43.

[2] *Cf supra*, pp 36-37, *Minnesota Monthly* (1869), vol 1, p 176, *Minneapolis Tribune*, throughout the spring of 1869 Reduction in rates to Chicago was attributed to competition of the river.

products of Minnesota The amount of wheat seeking a southern market or a southern route to the East grew steadily less, in spite of the fact that public opinion in Minnesota favored river transportation [1]

The diversion of the wheat from the river to a more direct route eastward was largely the result of developments in rail transportation The unreliability of the river had long been a cause of dissatisfaction [2] And many grain men thought the quality of wheat deteriorated when shipped via the southern route Both difficulties were avoided by rail shipments The southern port, New Orleans, was losing its importance as a wheat export market [3] Furthermore, in the late sixties most traffic originated on the railroads in Minnesota, and diversion at river points involved some expense Such diversion was opposed to the interests of the railroads, which favored the long haul, and they, accordingly, adapted their rates to prevent diversion [4] Another significant reason for the change was the cheapening of rail transportation [5]

The growing importance of railroads is illustrated by the change in routes from Chicago to New York In 1868

[1] Illustrations of proposals for the improvement of the river to encourage river trade *Minn House Journal,* 1870, p 17, *Minn Gen Laws,* 1872, pp 201-202, *Farmers' Union* (Aug, 1873), vol vii, p 260, *Anti-Monopolist,* Dec 4, 1874, p 3 and March 11, 1875, p 6 For the declining importance of the river *cf Internal Commerce of the United States,* 1879, app, pp 97-102 and 1891, app, pp 66-67

[2] *Cf supra,* p 40

[3] *Report, Sel Com on Transp Routes to Seaboard,* 43rd Cong, 1st Sess, *Senate Reports,* no. 307, vol. 1, pp 192-201

[4] In 1873 the rate on a bushel of wheat from Wykoff to La Crosse, 68 miles, was 18 cents, but if the grain were sent directly to Chicago, the rate for the whole distance was only 38 cents, according to a report in the *Preston Republican,* Feb. 28, 1873, p. 3

[5] Tunell, "The Flour and Grain Traffic," *Jour Pol Ec* (1896), vol v, pp 341-345, Ripley, W Z, *Railroads. Rates and Regulation* (New York, 1920), p 17

practically all the grain shipped from the Northwest to New York went by way of the lakes and the Erie Canal, in 1872, 70 per cent went the canal route, and by 1876 only 57 per cent [1] The total receipts at Buffalo, where grain was transferred from the lake to the canal, diminished in the seventies [2] But the increase in rail shipments was even greater than the decrease in lake shipments, for wheat production was rapidly increasing

The explanation of this shifting to rail routes is found in the increased efficiency in handling rail shipments, in falling rates and in the rise of rail competition from Chicago to the seaboard Shipments by rail were more direct and saved expense by eliminating transfers [3] The lake-canal rates from Chicago to New York fell from 22 79 cents in 1868 to 11 43 cents in 1875, at the same time the lake-rail (rail from Buffalo) rates fell from 29 to 14 6 cents and the all-rail rates from 42 6 to 24 1 cents [4] The lake-canal rates were not so low as they appeared, compared with rail charges The rail rates were so much lower in summer that they then were nearer lake rates than these annual averages indicate [5]

[1] Meyer, H R, *Government Regulation of Railroad Rates* (New York 1905), p 219 In 1860 eleven of fourteen million bushels of wheat shipped from Chicago were sent by canal, according to *Report, Chicago B T*, 1861, p 22

[2] *Internal Commerce of the United States*, 1891, app, p 33

[3] Tunell, *op cit* The *Com and Fin Chronicle* (1869), vol viii, pp 583-84 suggested that New York, Buffalo, Chicago and Milwaukee could cheapen the moving of wheat eastward and thus compete with St Louis and New Orleans, by cutting tolls, rates west of Lake Michigan and transfer charges

[4] *Report, N Y Prod Exch*, 1890-91, p 72 The canal tolls fell from 6 cents in 1868 to 1 74 in 1875, thus decreasing canal charges *Com and Fin Chronicle* (1869), vol viii, p 584, and *Report, Buffalo Merchants' Exchange*, 1902, p 101

[5] *Sel Com on Transp Routes, op cit*, app., p 35 That was doubly important for the reason that very little grain was shipped by rail in winter

The lake-canal rates included tolls but neither transfer charges nor insurance[1] There was also a supposed advantage in shipping by rail, in that it was thought the grain arrived in better condition[2]

In the early seventies competitive rail routes were established between Chicago and the seaboard. In 1869 the New York Central reached Chicago, and the following year the Pennsylvania[3] The Baltimore and Ohio obtained through connections to Chicago in 1874[4] The last two became serious rivals of the New York Central, of the lake-canal route and of New York City. Their competition led to "rate wars" which were of significance to the northwest grain trade In the wars of 1874 and 1875 rail rates on wheat from Chicago to New York, which had been 36 cents in 1873, fell to 24 cents in 1874 and to 18 cents the following year[5]

Though rates from Minnesota to New York were falling in the late sixties and early seventies, the decrease was not so definite when compared with the fall in wheat prices The following graph shows the number of bushels of wheat carried from a competitive point on the Mississippi to New York City for a sum equivalent to the price of one bushel in the New York market

[1] *Report, N Y Prod Exch*, 1890-91, p 72, *Internal Commerce of the United States*, 1891, p xliii

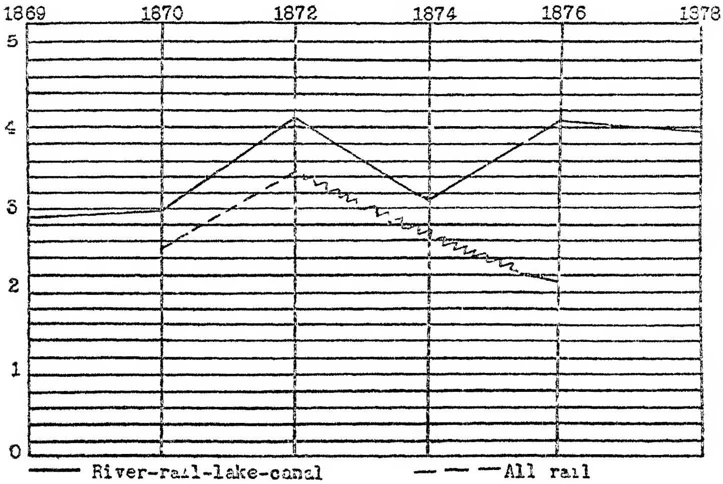
[2] Tunell, *op. cit*

[3] Poor, *Manual of Railroads*, 1870-71, p 145

[4] Poor, *Manual of Railroads*, 1875-76, p 212.

[5] Ripley, *Railroads· Rates and Regulation*, pp 21-24

NUMBER OF BUSHELS OF WHEAT CARRIED TO NEW YORK BY THE PRICE OF ONE[1]



Methods of handling and charges at transfer points were also improving Floating elevators were coming into use at the ports[2] Ordinary land elevators, which were used

[1] Basis for comparison

Prices—average annual prices of Milwaukee Club in New York in *Report, N Y Prod Exch*, 1880, p 430

Rates—1869, *Hunt's Merchants' Mag and Com Rev* (May, 1869), vol lx, pp 386-387

1870, *Report, Minn Rail Com*, 1871, p 48; *Internal Commerce of the United States*, 1891, p xxiii, *Report, N Y Prod Exch*, 1890-91, p 72

1872, *Ibid*, *Report, Minn Rail Com*, 1871, p 48 and 1873, p xxii

1874, *Record and Union*, Aug 14, 1874, p 3, *Report, N Y Prod Exch*, *op cit.*

1876, *Report, Minneapolis B T*, 1876, p 45

1878, *Cf infra*, p 127

Rates were calculated from competitive points (1869-1872 from Winona and 1874-1878 from Minneapolis) and hence represent the lowest rate from the state

[2] *St Paul Weekly Press*, March 8, 1866, p 2, stated that New Orleans was to have two floating elevators

early in Chicago and Milwaukee, were being built at eastern terminals[1] Improvements in methods of handling grain led to decreased charges[2] From 1869 to 1875 elevator rates at Buffalo fell from 2 to 0 87 cents[3]

Ocean rates did not fall in proportion to the decrease in land charges In 1868 the New York–Liverpool steamer rate a bushel of wheat was 14 36 cents, following a decrease by 1870, there was an increase to 21 12 cents in 1873 and a fall to 16 14 cents in 1875[4] As Liverpool was the world wheat market, the rise in ocean rates was of importance to American wheat and neutralized much of the gain in land transportation, especially since few countries at the time had so long an ocean haul as America.

One significant development which accompanied the shifting of transportation routes was the change in the relative position of central markets bidding for Minnesota's wheat and in the methods of trading and of handling wheat in those markets. St Louis was practically eliminated from Minnesota's wheat trade The position of Milwaukee and Chicago was strengthened, and two new markets arose which were later to contest the supremacy of Milwaukee and Chicago

The strongest competitors for Minnesota's wheat until the end of the seventies were Milwaukee and Chicago[5]

[1] *Report, Indust. Com*, vol vi, p 70, *Report, Milwaukee C C*, 1858, pp. 24-25 *Report, St. Louis Merch Exch*, 1865, pp 11-12 First one at Baltimore in 1872, according to Ripley, *op cit*, p 20

[2] *Ibid*, cost of unloading at Baltimore had been 4 to 5 cents a bushel

[3] *Hunt's Merchants' Mag and Com Rev* (May, 1869), vol. lx, p 386; *Report, Buffalo Merch. Exch*, 1902, p. 101.

[4] *Internal Commerce of the United States*, 1884, p. 422

[5] *Report, Minn Rail Com*, 1873, in *Minn. Ex Docs.*, 1873, pt ii, pp 207-208, 227-228, 240-241, 252-253 and 268; *Minneapolis Tribune*, Feb. 22, 1870, p 3.

Until 1875 the former was the largest single buyer [1] The explanation of the strength of Milwaukee is found in its position in relation to the Great Lakes trade, in its strong control of railroads in Minnesota and in its location in the northern spring wheat area [2] Milwaukee offered a higher price than Chicago for no 2 spring wheat until the end of the seventies [3] Minnesota farmers felt that Milwaukee paid better because it handled a higher quality of spring wheat than did Chicago Milwaukee spring regularly brought a few cents more a bushel than Chicago spring in the New York market [4] But the strength of Milwaukee decreased with the growth of Chicago as a railroad center and as a grain market [5] The competition of these two cities was beneficial to Minnesota's wheat trade, although, as will be seen later, its effect was somewhat lessened by the railroad situation between Minnesota and the Lake Michigan markets

While Milwaukee and Chicago were establishing their position, a number of ambitious young rivals were appear-

[1] *Pioneer Press*, Oct 1, 1878, p 10 In the volume of its wheat trade, Milwaukee reached the highest point in 1875, according to annual receipts in *Report, Milwaukee C C*, 1892, p 33 But even while Milwaukee's trade was increasing, Chicago was blamed for preventing a larger increase Milwaukee's attitude toward Chicago is illustrated by a quotation from *Report, Milwaukee C C*, 1872, p 155 "our rival sister city of Chicago, whose people have endeavored to convince the world that everything great, everything honest, everything enterprising, everything that *is* or would be for the general good of mankind, centers in that city"

[2] *Report, Chicago B. T*, 1870, p 15, *Chicago Tribune*, July 29, 1875, p 8

[3] *Report, Milwaukee C. C.*, 1892, pp 81-82, *Report, Chicago B T*, 1875, p 52 and 1880, p 40, *Chicago Tribune*, July 30, 1875, p 4

[4] *Report, N Y Prod Exch*, 1891-92, p 58, *Chicago Tribune*, Aug 8, 1875, p 6 and July 29, 1875, p 8

[5] In 1873 the Chicago and Northwestern Railroad secured through connections with Minnesota In 1874 the name of the Milwaukee and St. Paul was changed to Chicago, Milwaukee and St. Paul The roads from Baltimore, Philadelphia and New York entered into effective competition about 1874 for the wheat of the Northwest

ing in the West In Minnesota, many towns were making lively efforts to extend their trade and to become the metropolis of the region Winona had ambitions of that nature in the sixties, and Red Wing and Rochester about 1870 Their expectations had been fostered in the river period, but with the moving of the producing areas northward and westward and with the growth of a new transportation system, the relative strength of different points was changed, and the centers of trade moved to the falls of St Anthony and the westernmost point of Lake Superior Minneapolis and Duluth soon became the leading primary markets for Minnesota's wheat

The history of Duluth's grain trade dates from the year 1870, when railroad connections with the interior were established From there, the superior wheat of the Northwest could be forwarded, unmixed, to eastern markets by way of the lakes, which offered comparatively cheap means of transportation [1] Duluth's grain trade was, however, not very large during the seventies, in only one year did the city receive as much as 2,000,000 bushels of wheat [2] Its greatest importance was to come with the development of the Red River Valley

Unlike Duluth, Minneapolis owed its early importance in the wheat trade to the demands of its flour mills In 1865 the flour output of Minneapolis mills was not sufficiently large to place them above other mills of the state By 1870 the annual output had risen to 193,000 barrels, and in 1875 Minneapolis, producing 543,000 barrels of flour, was regarded as the milling center of the state [3] It was at a dis-

[1] The *Minneapolis Tribune*, June 13, 1873, p 3 notes that Duluth No 1 wheat brings 10 cents more in Liverpool than Chicago No. 1 and 6 more than Milwaukee No 1.

[2] The *Report, Duluth B. T.*, 1885, p. 14, gives annual receipts and shipments

[3] The *Report of the Minneapolis Chamber of Commerce and Board of Trade*, 1882, p. 41, gives annual flour production

advantage, however, for the wheat area was to the south and southwest, where local mills and Chicago and Milwaukee trade influences were strong

The central wheat markets were undergoing certain changes which were of general significance in the trade Changes at Milwaukee and Chicago were of special importance to Minnesota, for almost all the wheat going eastward from Minnesota in the late sixties and in the seventies was consigned to Milwaukee or Chicago, where it was sold and either stored in local elevators or immediately reshipped [1] Hence some consideration of the handling of wheat in those markets is essential to this study

Storage was practically all under private control Elevators, like freight houses and passenger depots, were generally owned by railroads The elevators were leased to a few individuals who controlled storage in the market In 1869 all the elevators in Milwaukee were managed by Angus Smith, and the bulk of the grain received or discharged at the lake was put through an elevator which he owned [2] The same situation existed three years later when Smith managed his own storage and the rest, which was owned by the Milwaukee and St Paul Railroad [3] In Chicago the early elevators were likewise owned by railroads and were under private control [4] In 1872 eight men, working together, controlled all the storage in the city [5]

There was much criticism of the elevators of Milwaukee and Chicago The storage charge was a heavy tax on wheat So irregular was the system that in Chicago storage

[1] Through billing to the seaboard was not used before the eighties

[2] *Report, Milwaukee C C*, 1869, p 52

[3] *Ibid*, 1872, p 69

[4] *Report, Indust Com*, vol vi, p 70

[5] Federal Trade Commission, *Grain Trade*, vol ii, p 95, quoting Taylor, *History of Chicago Board of Trade*, vol i, p 460.

was charged on grain which was not even put into elevators For instance, in the seventies a charge of 2 cents was made for all grain whether or not it was ever in a warehouse[1] Railroads compelled shippers to consign their grain to certain elevators controlled by the "ring" by charging higher rates on grain shipped to independent elevators[2] Complaint of cheating in weight was common[3] The "mixing" of grain in store was severely criticized by those who sold a superior grade of wheat[4]

Various attempts were made to improve storage conditions Laws were passed in the sixties for regulating the relations of railroads and elevators, but the evils persisted[5] The Illinois constitutional convention of 1870 embodied in the proposed constitution an elaborate article on warehouses.[6] The railroad and warehouse commission and public ware-

[1] Federal Trade Commission, *op cit*, pp 99-100, Bogart and Thompson, *The Industrial State* (Springfield, 1920), p 366

[2] Bogart and Thompson, *The Industrial State*, p 366

[3] This and other frauds were charged against Chicago and Milwaukee by the *Anti-Monopolist* (a paper published by Minnesota's leading reformer, Ignatius Donnelly), which quoted the *Milwaukee Journal of Commerce*, the *Industrial Age*, the *Bureau County Republican* (Illinois) and other papers to substantiate its charges

[4] By "mixing" wheat is meant the then common practice of combining grain of two different grades in such a way as to raise the lower to the grade of the higher The objection to this was that it lowered the quality of the superior grain Minnesota, which produced a superior spring wheat, objected to this very commonly Said the *Report, Minn Rail Com*, 1873, p lii "The larger part of our wheat now goes to Milwaukee and Chicago, and is there thrown into elevators with the soft wheat of those states, consequently its superior grade is lessened or lost" The collusion of elevators and railroads prevented competition from regulating this matter *Cf Chicago Tribune*, July 29, 1875, p 8 and Aug 8, 1875, p. 6

[5] *Wis Gen Laws*, 1864, ch 390, *Illinois Public Laws*, 1867, pp 177-182.

[6] *Cf* Kettleborough, Charles, *The State Constitutions* (Indianapolis, 1918), Illinois Constitution, art. xiii, for this interesting development in constitution making

house acts were passed in 1871 to provide regulation as directed by the constitution[1] Provision was made for state inspection and weighing in Chicago, storage rates and warehouse receipts were to be regulated by a warehouse commission, and the shipper was given the right to choose the elevator in which he wanted his grain stored[2] The railroads and elevators resisted the laws at first, but, after these were upheld by the Supreme Court in Munn *v.* Illinois, state regulation was accepted[3]

Grain was at first graded according to rules established by the Chicago Board of Trade and the Milwaukee Chamber of Commerce Grain grades based on weight were adopted in Chicago and Milwaukee in 1858, an innovation which was accepted by eastern markets in the early seventies[4] Grading by weight marked a great advance, for this method was very much more definite and accurate than others used But no system of grading is satisfactory if it is not honestly observed, and the rules for grading, as well as those for weighing, were grossly abused[5] In order to improve inspection, Illinois, as noted above, provided for uniform state inspection based on grades established by the railroad and warehouse commission[6]

Minnesota farmers did not consider the establishment of

[1] *Illinois Pub Laws*, 1871-72, pp 618 and 762

[2] *Report, Illinois Railroad and Warehouse Commission*, 1874, p 31

[3] *94 U S*, p 113, *cf Report, Indust Com*, vol vi, p 70

[4] *Report, Milwaukee C C*, 1858, p 13, *Report, Chicago B T*, 1858, pp 11, 12, 15 and 16, *Report, Ill Rail and W'house Com*, 1874, p 33

[5] The *Prairie Farmer* (July, 1866), vol xviii, p 38 expresses the following opinion of grading at Chicago The system "may be necessary and well enough perhaps, if honestly carried out, but as practised.. is a fraud of such magnitude as only the very richest farmers can stand. . When the business men of Chicago learn that 'honesty is the best policy,' all will be well"

[6] *Illinois Pub Laws*, 1871-72, p 762

grades by a state commission in Illinois satisfactory They thought that Illinois state grades did not recognize the superior quality of Minnesota wheat The Chicago and Milwaukee grades, said the United States Commissioner of Agriculture in 1872, agreeing with Minnesota, were established according to the soft wheat which they had been receiving from places other than Minnesota Since Minnesota produced most of the hard spring wheat in the country, it was desirable that the quality of its wheat be recognized [1]

A significant feature of the wheat trade in Milwaukee and Chicago in the late sixties was the development of trading in futures [2] Such trading had been carried on in Chicago since the Civil War, but the first appearance of rules governing trades in futures was in the report of the Board of Trade in 1869 [3] This practice marked a great advance in the grain trade in that it minimized the risks to those who did not have sufficient resources to meet the fluctuations in price from season to season, or even from day to day. But it was accompanied by "corners", which were, however, no more severe than those under the old system of trading, and by false market information and other questionable practices which made futures trading appear as a distinct evil in the grain trade

Despite their apparent evils, market organizations like the Chicago Board of Trade and the Milwaukee Chamber of

[1] Quoted in *Report, Minn Rail. Com*, 1873, p liii Note similarity to attack made on Minnesota grades by North Dakota Non-Partisan League

[2] By "trading in futures" is meant buying or selling a certain grade of wheat to be delivered at a given price at some future time, that is, some months later.

[3] *Report, Chicago B T*, 1869; Federal Trade Commission, *Grain Trade*, vol v, p 27, Emery, H. C., *Speculation on the Produce and Stock Exchanges of the United States, Columbia Studies* (N Y, 1896), vol. vii, pp. 40-41.

Commerce were absolutely essential to the distribution of the immense surplus production of the West In the process of their development much was done which was positively harmful to the great majority of wheat traders and growers, and this tended to obscure the value of the new organization.

Thus a new system grew for carrying Minnesota's wheat to the consumer The seasonal and unreliable water routes were supplanted by railroads reaching from the farm communities to primary and export markets At the same time the relative position of old markets changed, and new ones appeared In the primary centers, improved methods developed for handling the grain trade, and new problems arose All these changes were reflected in the local wheat trade and worked together with local developments to produce a new market organization

CHAPTER IV

Monopoly and the Grange, 1868-1875

The years 1868 to 1875 denote a period characterized by new developments in Minnesota's wheat-marketing agencies The growth of the transportation system brought problems as to rates and services, introduced new classes of local grain middlemen and occasioned changed relations with central markets The monopolistic features of the system aroused the opposition of the farmers, who began to seek redress through organizations and efforts closely associated with the Grange [1]

Transportation rates presented the most outstanding problem in the earlier years of local railroad enterprise In their eagerness to secure railroads, the people of Minnesota had given aid to roads which encouraged construction beyond the existing needs of some areas traversed [2] Furthermore, the absence of effective public limitations on the management of the railways resulted in their claiming the right to determine the conditions on which freight should

[1] A farmers' organization in the new northwest states in the late sixties and the seventies

[2] Saby, R E, *Railroad Legislation in Minnesota* (St Paul, 1912), pp 68 and 131, Stickney, A., *The Railway Problem* (St Paul, 1891), p 13; Gov Austin's inaugural address, *Minn Ex Docs.*, 1869, p. 6; *Report, Minn Rail Com*, 1872, p. 50, 1874, p 6, 1875, p 4, *Owatonna Journal*, Aug 21, 1873, p 2, quoting the general manager of a leading road in the state, who said that the railroads of Minnesota were prepared to do ten times more business than they were getting, *Farmers' Union*, Aug 16, 1873, p 260

be carried[1] Therefore the strongest single factor directing rate making was a necessary result of competition on the part of roads extending faster than the trade they served Accordingly, rates were irregular and high

At any one point the charges were affected by the presence or absence of competing wagon, water or rail routes, by the desire of roads to carry goods the longest distance possible and by the degree of strength of shippers at terminal and local markets The result of such a system was great irregularity in rates They were low at some points and high at others, low to one place and high to another, and low for some shippers and high for others The evils of this system of rate making began to attract attention in Minnesota in the late sixties

The most common form of discrimination was that which favored competing points All the roads in the state gave lower rates to such places The effect of water competition is seen in the absence of complaints along the river division of the Milwaukee, on the St Paul and Sioux City, as far as it followed the Minnesota River, and at Stillwater on the St Croix Places having competing railroads were very favorably treated The more important of these were Minneapolis, St Paul, Mankato, St Peter, Owatonna and Austin Points within reasonable marketing distance of competing river or rail routes were given some consideration The places enjoying no competition were charged as much as the traffic would bear The situation may be

[1] Most of the railroad charters had stipulated that freight be carried at reasonable rates, according to the *Report, Minn Rail Com*, 1871, p 19. The state constitution said (art x, sec iv) that rates should be equal and reasonable. A railroad act of 1869 (*Minn Gen Laws*, 1869, ch 78, sec ii) stated that such reasonable rates might "be from time to time fixed by said corporation or prescribed by law" But no definite attempts had been made to enforce or define these provisions, and the roads generally refused to recognize the right of the state to control

illustrated by a few cases Faribault continually complained of unfavorable discrimination In 1868 it paid 10 cents more a bushel of wheat to Chicago than Farmington 30 miles and Mendota 50 miles farther north, both competing points [1] Rochester, which became the center of an anti-railroad movement, was in a bad position In 1870 it paid 15 cents a bushel for a 45-mile haul to Winona, while on the same road Owatonna paid 10 cents for a 92-mile haul to that place and Mankato paid 13 cents for 150 miles [2]

"Through" freight was generally favored in the earlier years, as is indicated by rates established in 1870 and 1871 The charges on wheat a ton a mile shipped from Breckenridge to St Paul, terminals of the St Paul and Pacific, amounted to 4 048 cents, while the rate between any intervening station and St Paul was 6 082 cents On the St Paul and Sioux City corresponding rates were 5 104 and 8 571 cents, and on the Winona and St Peter, 4 001 and 8 048 cents [3] At any points these rates were subject to modification to meet competition But this type of discrimination diminished so that it was less common by 1875 [4]

Competition of the long and short haul was especially effective in determining rates on roads leading to more than one primary wheat market Wheat was carried at 18 cents a bushel from Wykoff to La Crosse, a distance of 68 miles, but in order to overcome the competition of the river the through rate from Wykoff to Chicago was 13 8 cents [5] The

[1] *Winona Weekly Republican*, Sept 2, 1868, p 3

[2] *Federal Union*, Dec 3, 1870, p 1, *Report, Special Joint Railroad Investigating Committee to the Legislature of Minnesota*, 1871, p 97. *Report, Minn. Rail Com.*, 1871, p 17.

[3] *Ibid*, p 48.

[4] Reports of individual railroads in *Report, Minn Rail. Com*, in *Minn. Ex. Docs*, 1876, vol ii. In 1875 the M and St. L and the N P charged 3.5 cents for through freight and 7.6 for local, but these were rather exceptional.

[5] *Preston Republican*, Feb 7, 1873, p 3

development of Minneapolis milling and the bidding of the Duluth route for grain at St Paul tended to draw the wheat north, thus making a short haul on the Chicago and Milwaukee roads The Lake Superior and Mississippi Railroad was built partly to weaken the power of these roads, but this expectation failed to foresee the efforts which a strong line would make to retain its trade

The first "rate war" on Minnesota railroads occurred between the Duluth road and the ones to Lake Michigan The war began with the adjustment of rates by the Milwaukee and St Paul in such a way that it was cheaper to ship to Chicago from any station on the road than to Duluth via Minneapolis or St Paul [1] Such rates were made from stations on independent lines like the Southern Minnesota, the Winona and St Peter and the St Paul and Sioux City, which connected with the Milwaukee and St Paul, as to force their traffic to the Milwaukee [2] Those rates did not always cover even the amount due to pay the local rate on those independent lines, but the Milwaukee supplied the deficiency from rates at non-competitive points on its own lines [3] This war prevented shippers from enjoying the benefits of competition in the choice of markets and routes.[4] The millers of Faribault complained of prohibitive rates to the Twin Cities but were answered by the road that "such discrimination is inseparable from railway management, and that 'what can't be cured must be endured'" [5] The Duluth road retaliated against the Milwaukee by lowering its rates. The war raged for two years, ending in the inevitable submission of the Duluth road to liquidation [6]

[1] Stickney, *The Railway Problem*, p. 41; Saby, *Rail Leg in Minn.*, p 129

[2] *Ibid.*, p. 42, *Minneapolis Tribune*, June 3, 1873, p 3

[3] Stickney, *op cit*

[4] *Report, Minn Rail. Com.*, 1873, p 11.

[5] *Ibid*

[6] *Ibid*

In 1873 the rates again returned to their former levels, for the Lake Superior and Mississippi was reorganized so that it was strong enough to discourage the Milwaukee from starting the fight again The war had increased suspicion of railroads in Minnesota, and the strong discontent which existed earlier was aggravated at non-competitive points not enjoying the benefits of the war The ruthless use of the power of the roads, without consideration of the public, was brought into strong relief

Large shipments were very often favored On the St Paul and Pacific wheat shipments of 10,000 or more pounds went fourth class, and lots under 10,000 but over 100 pounds went third class From Smith Lake to Minneapolis third-class shipments of wheat were charged 32 and fourth class 20 cents [1] Large shippers were also given elevator privileges which were of considerable value But the most common form of discrimination between shippers was the practice of granting rebates to certain individuals [2] This form of favoritism was especially bad, for it tended to destroy competition in the local wheat trade

Rates on Minnesota railroads were, on the whole, considerably higher than on the roads farther east In 1868 the average rate a ton per mile on the Chicago and Northwestern was 3 13 cents, while the average of three large eastern roads was 2 153 cents.[3] The averages for the same roads for 1870 were 3 09 and 1 588⅔ cents, and for 1875 were 2 10 and 1.80⅔ cents. The average for all roads in Minnesota was 3.8 cents in 1871 and 2 523 in 1875.[4]

[1] *Minneapolis Tribune*, Feb. 22, 1870, p 2

[2] *Cf infra*, p 84 *et seq*

[3] *Report, Minn Rail. Com.*, 1873, p xxii; average for N. Y. C. and Hudson River, for N. Y, L E and Western and for Penna given in *Internal Commerce of the United States*, 1880, p 6.

[4] *Ibid* ; *Report, Minn. Rail Com.*, 1873, p. xxii and 1885, p. 61.

The rates on the roads northwest of Minneapolis were higher than those in the southeastern part of the state But those rates did not represent the charge to all shippers and at all points To favored places and shippers the rates were fairly satisfactory, for others the charges were higher. It is noted, however, that there was a steady fall in rates from year to year [1]

In the seventies a new situation arose in the making of rates Railroads and packets attempted to eliminate competitive charges by agreements By 1871 managers of railroads and packets were agreeing on rates from competitive points to Duluth, Chicago and Milwaukee [2] A most significant development appeared in 1874 when the traffic between Chicago, Milwaukee, St Paul and Minneapolis was pooled by the Chicago and Northwestern, the Milwaukee and St Paul and the Chicago, St Paul and Minneapolis Fifty per cent of its freight receipts was retained by each road for expenses, the rest was divided among the members of the pool according to agreed proportions [3] Competition was thus being displaced by combination

Discrimination and high rates, therefore, characterized transportation charges in Minnesota The latter exacted a heavy toll from the wheat trade of the state The former resulted in irregularities which were undesirable for both roads and shippers For the wheat trade it was especially bad, because the system by which certain shippers were favored destroyed the competition of primary markets and of buyers in certain local markets.

[1] *Report, Minn Rail Com.*, 1871, p 17, *Minn Ex Docs*, 1876, vol. ii reports of individual roads

[2] *Owatonna Journal*, Aug 10, 1871, p 2 The *Report of the Sel Com on Transp Routes to Seaboard*, 43rd Cong, 1st Sess, *Senate Reports*, no. 307, vol. 1, p 118, and the *Record and Union*, Aug 14, 1874, p 3 record the continuation of the agreement

[3] *Internal Commerce of the United States*, 1879, p 176

In the local wheat trade, as in every middleman relation of the farmer, the maintenance of competition was supposed to insure the most satisfactory conditions in the market This was peculiarly significant to the farmer because of his low bargaining power and because of his difficulty in securing market information The amount of wheat the average farmer sold was a relatively small proportion of the amount offered in the market, and a few hundred bushels more or less did not make a great deal of difference to the grain buyer Oliver Dalrymple, on the contrary, who raised as much as 40,000 bushels of wheat a year, was respected by transportation companies and by grain buyers, with the result that he was able to secure a higher price for his grain than his neighbors did [1] Dalrymple was, furthermore, primarily a manager and not a laborer, as most farmers were For that reason he was more informed on the organization of the wheat market and on price conditions The market information of the average wheat farmer was extremely inadequate His only possible source of information was the newspaper, which he secured infrequently from the post office and which very rarely contained helpful market reports [2] The position of the farmer is illustrated by one newspaper's description of a "joke" on a farmer This farmer brought a load of hogs 5 miles to market at Chatfield, where he found the price lower than he had expected So he drove to Rochester "20 miles over the worst roads

[1] *Minnesota Monthly* (July, 1869), vol i, p 219; *Hearth and Home* (Dec, 1869), vol ii, pp 5-6, *Farmers' Union* (May, 1873), vol vii, p. 153

[2] Price quotations were carried regularly by some newspapers and occasionally by others. For instance, from 1870 to 1871 the *Preston Republican* rarely had any, but in 1873 it began to carry local, Milwaukee, Chicago and New York prices In 1867 the *Northfield Recorder* contained local prices, only, and seldom any other from 1868 to 1871. From 1872 to 1875 the *Northfield Standard* carried no price figures But even the reports given by the papers were old before reaching the farmer. No reliable crop reports were obtainable.

we have had this season" Finding the market in Rochester even lower, he returned to Chatfield and sold for the price first offered, after having driven 40 miles.[1] Small wonder that the matter of maintaining competition in the local market was so vital to the farmer!

As in the river markets, so in the newer railroad markets there were different types of wheat middlemen These were agents of railroads and of grain companies in the larger markets, permanent independent local buyers, local millers and transient grain dealers At some points the millers took almost all the grain offered At others there were local shipping buyers only The most common buyer everywhere was a permanent or transient representative of some larger trader in a river town or other market of some size At many places the trade was too small and uncertain to support a continuous market In the newer communities representatives of outside interests were the only buyers until local middlemen developed In those places the grain buyers loaned the farmers seed wheat, to be paid with interest in the same grain Many dealers bought grain on commission for companies in the primary markets This arrangement was significant, for it made a market possible where there was insufficient local capital to finance the trade [2]

The most permanent factor in the trade was the country miller. The mills of the southeastern part of the state were, on the whole, very prosperous at this time, in spite of the great risks which they were forced to carry [3] With

[1] *Chatfield Democrat*, Dec 12, 1868, p 3

[2] *Preston Republican*, Jan 31, 1873, p 3

[3] A miller in Fillmore County made $25,000 one year in the late sixties The following year he lost everything because the local crop was poor, and a flood broke the mill dam Floods, fires, changes in milling machinery and poor crops made the millers' position precarious Among the successful millers were Ames, Archibald, Kaercher and Mowbray

advance orders to fill and with considerable capital invested, the millers had to buy wheat They generally paid well. The demand of these country millers was permanent, but their influence was generally merely local, so that they were never able to combine among themselves nor to make agreements with the railroads, which would enable them to control the market The Minneapolis millers, on the contrary, even in the earlier years, found it possible and advantageous to combine and to bargain with the roads [1]

In the earliest years of the railroad grain markets competition seemed to exist to a considerable extent in the local wheat trade In the larger towns the farmers were met on the roads by buyers who bid for their grain [2] They received from the buyer whose bid was accepted a ticket bearing the date, the price and the names of the buyer and seller The grain was then delivered at the elevator and was weighed, the weight being recorded on the ticket Even where competition generally existed, there was a tendency toward price agreements for the sake of controlling the market It was no secret that the buyers tried to agree on the price and on taking loads in rotation [3] Such attempts to control the market were evidently not long effective Some larger buyers also resorted to hiring scalpers to keep the price down by bidding low and yet maintaining the appearance of competition [4] The newspapers at times mentioned the success with which local business men insisted that the grain "speculator" pay a fair price to the farmers [5]

[1] The southeastern millers did attempt about 1875 to organize to get better freight rates For Minneapolis, *cf infra*, pp 133-134

[2] *St Charles Weekly Herold*, Dec 10, 1869, p 3, Shatzel, "Wheat Fields of Minnesota," *Harpers* (1868), vol xxxvi, p 200 gives a good description of a market St Charles had ten wheat buyers in 1869.

[3] Shatzel, *op cit*, and *St Charles Herold, op cit*; *Preston Republican*, Sept 15, 1868, p 3, *Farmers' Union* (Aug., 1868), vol ii, p. 12.

[4] *Report, Spec Joint Rail Inv Com to the Leg. of Minn*, 1871, p 177.

[5] The *Rushford Republican* and the *Preston Republican* often mentioned such interference and urged their own business men to enter the trade

These early railroad markets were lacking in efficiency. When the railroads did not provide elevators, the grain was received, stored and shipped from flat warehouses There was often not a continuous market, and the amount of business at some of the smaller places was not sufficiently large to develop the responsibility and specialization requisite to a good market

The political phase of the Granger movement in Minnesota in 1870 advertised a changing condition in the local grain trade The existence of large buyers who had close relations with railroads indicated the appearance of a new class of grain middlemen which threatened to dominate the market Since the functioning of this group depended on the position and the policy of the railroads on which they were operating and since the actual practices of the roads were not uniform, a detailed description of this condition is necessary

The most striking instance of the change is found on the Winona and St Peter Railroad Until 1873 this road owned most of the elevators at its stations and handled the business of storing and loading the grain through its local agent, who at times also bought grain for the road When wheat was received at the elevator, it was weighed and graded and a ticket stating the grade and weight was given the owner If the grain were stored, storage was charged, if it were shipped, no elevator charge was made because the freight rate included these expenses [1] When elevator charges were included in the freight rate, the railroad practically controlled storage, weighing, grading and ship-

[1] *Winona Republican*, Feb 4, 1865, p 3, *Rochester Post*, Feb 7, 1866, p 8, *Preston Republican*, March 12, 1869, p 3, *Minneapolis Tribune*, Feb 17, 1871, p 2, *Minnesota Record*, Dec 27, 1873, p 2 According to the *Minneapolis Tribune, op cit*, three fourths of the wheat in store at Winona in March, 1869, was in the elevator of this road Also, *Report, Spec Joint Rail Inv Com to Leg of Minn*, 1871, p 94

ping of grain at its stations This together with its control of rates made it possible for the road to exert a strong influence in the wheat trade

The Winona and St Peter was notable for the extent to which it used its power to favor certain shippers An example of such discrimination is found in the so-called "wheat ring" The ring, composed of Joseph Reynolds, John Robson and Angus Smith, was formed in the late sixties [1] The general manager of the road testified before a committee of the legislature that the ring arranged to buy grain at the stations on the road, paying the actual price in the Milwaukee market minus freight As compensation it was granted rebates of 3 to 4 cents on a 15-cent rate to Winona, 7 cents on a 33-cent charge to Milwaukee and similar rebates on other distances [2]

The railroad maintained that the ring was encouraged in order to make grain buying on the road more economical and to secure a better price for the farmers so as to get the grain which was going from the territory of this road to markets on the Mississippi and along the Southern Minnesota Railroad It is undeniable that competition of routes at times forced the roads to participate in the wheat trade in this manner That situation does not however, explain, the fact that the Winona and St Peter continued the arrangement with the ring after it was found that even more trade than formerly was seeking other markets in order to escape the ring [3]

[1] *St Charles Weekly Herold*, Aug 26, 1870, p 2

[2] Report of Com, *op cit*, pp 143, 147, 149 and 179 Testimony of Mr. Stewart, general manager, Mr Van Dusen, later agent of the road, Mr Follet, representative of the ring, and Mr Overmire, a scalper

[3] Report of Com, *op cit*, pp 149, 177 and 179 Van Dusen testified that one fourth of the wheat tributary to the W and St P. sought other markets because of the wheat ring Also, *St Charles Herold*, Aug 26, 1870, p 2

A further explanation of the wheat ring is found in the position of Robson, Reynolds and the Northwestern Railroad and in the strength of Angus Smith in the Milwaukee wheat trade[1] The Northwestern was forced to depend on packets for carrying its freight to the railhead on the Mississippi of its lines to Milwaukee and Chicago An agreement with the Robson and Reynolds packets was to be expected under the circumstances, for they were not friendly with the Davidson-Milwaukee alliance The fact that Angus Smith was so powerful in the storage system of Milwaukee made it possible for him to bargain with the railroads for trade The wheat ring appears, therefore, to have been a combination of agents against mutual competitors in the wheat trade This illustrates the complexity of factors determining the policies and practices of railroads at the time

The ring was in a position to pay higher for wheat than small scalpers or independents could Its rebates cut transportation costs considerably By the consolidation of buying on the whole road under one management, expenses could be cut further The ring was also able to avoid risks which had to be carried by others, because its close relations with central markets gave it an advantage in regard to market information, storage and sales It also had more capital and could secure loans more easily And, lastly, the ring was given special elevator privileges by the railroad[2]

The value to the farmers of the economies of the ring was determined by the extent to which such economies were reflected in better prices, including grade and weight, which would again depend on the presence or the absence of competition It was generally thought that effective competi-

[1] *Cf supra*, pp 31-33, 69, *Federal Union*, Feb 11, 1871, p 1, *Report, Milwaukee C C.*, 1875, p 54

[2] *Report, Spec Joint Rail Inv Com to Leg of Minn.*, 1871, pp 147, 165, 167 and 175

tion was driven off the Winona and St Peter by the ring There was some complaint of the price paid, the manager of the road admitted that the ring was not paying as agreed [1]

The strongest complaints against the ring concerned grading The grade was often merely estimated, or it was determined by the brass-tester method The ring claimed that it graded according to Milwaukee standards, but that was not always done Farmers said that other markets graded higher than the ring markets and that even the same lots of wheat were not graded uniformly by the ring [2] It must be remembered, however, that even with the best intentions it has been difficult to grade accurately by the method of grading used in most markets Although it is impossible to estimate to what extent irregularities existed, the fact that the disappearance of scalper competition made irregularities possible is of significance in a trade which had developed neither high business ethics nor accurate means and standards of measurement and which was forced to meet competition at its fiercest

The wheat ring combination was discontinued in the early seventies, but individual buyers obtained favors from the Winona and St. Peter road In 1873 Joseph Reynolds was still receiving special favors [3] The most important individual buyer was George W Van Dusen, who became one of the strongest figures in Minnesota's wheat trade Van Dusen started as a dry-goods merchant in Rochester By

[1] Report of Com, *op cit*, pp 143, 149, 167, 171, 179-180 (note especially testimony of Van Dusen), *St Charles Weekly Herald*, Aug 26, 1870, p 2 and July 1, 1870, p 2, *Owatonna Journal*, Oct 20, 1873, p 2, H H Young to Ignatius Donnelly, Nov 20, 1870, *Donnelly Papers*

[2] Report of Com, *op cit*, pp 138, 143, 149, 155-159 and 175 The legal method of grading (*Minn Gen Laws*, 1869, ch 87) was to fill a sealed half bushel and weigh it on tested scales, using weight as an indication of grade

[3] *Owatonna Journal*, Oct 30, 1873, p 2

1869 he was buying wheat independently there and at other stations and was receiving rebates from the road as far west as Janesville[1] In the summer of 1871 he became agent of the road at Rochester, which gave him supervision over the railroad elevator[2] Shortly after that he leased at a number of stations the railroad's elevators, which he purchased in 1873. He then began his career as the first line-elevator owner and grain buyer, combined, in Minnesota[3] He had rebates from the road He built up an extensive trade with Chicago, with which he later had private wire connections He eliminated risks by getting direct market information and by hedging his purchases on the Chicago Board of Trade So strong was his position, even in the middle seventies, that he had considerable control over smaller, independent wheat men

A somewhat different type of relationship between a railroad and a wheat dealer is found in the case of the Southern Minnesota Railroad and L C Easton of Chatfield This road had been pursuing a liberal policy toward its patrons It had left the whole enterprise of buying, storing and shipping grain to individual dealers, of whom there had been two or more at each point along the road where a sufficiently large business was done[4] The railroad had nothing to do with grain buying, and it was not known to discriminate in any way between shippers at its stations[5] But

[1] Information concerning Van Dusen was obtained by the writer from a prominent lawyer of Rochester who had since early days known him as well as other grain men and their relations with Van Dusen Also, Report of Com, *op cit*, p 147

[2] *Rochester Post*, Sept 9, 1871, p 3

[3] *Minnesota Record*, Jan 3, 1874, p 2

[4] "Louis Grieser *v* Charles McIlrath, Receiver of the Southern Minnesota Railroad," in *Minn Ex Docs*, 1877, vol ii, p 340

[5] *La Crosse Leader* quoted by the *Chatfield Democrat*, Nov 9, 1870, p 2, *Report, Spec Joint Rail Inv Com to Leg of Minn*, 1871, p 155

in the summer of 1872 the Southern Minnesota contracted with Mr Easton to maintain warehouses and to buy produce at every station [1]

According to the agreement Easton was to furnish capital and to buy produce at the price directed by the company, which was the Milwaukee price minus freight and a margin The day after it was bought, the grain was sold "to arrive" in Milwaukee From the proceeds of these sales Easton was to deduct the price he paid and all expenses of handling, together with 10 per cent on the capital he had invested and 1 cent a bushel for commission The railroad was to receive the balance as a freight charge [2]

Easton's headquarters were at Chatfield and Wells, from whence he kept in close touch by wire with Chicago and Milwaukee markets and with his buyers on the road [3] The buyers were hired by Easton and were given complete instructions concerning grades and prices They were said to grade strictly, for they were held responsible for any deficiency when the wheat was graded in a primary market [4]

An official of the railroad said the arrangement was made with Easton in order to bring to the road freight which was tributary to it, by providing a buyer at each station and by preventing combinations among grain men [5] This was quite necessary, for the Winona and St Peter was becoming stronger to the north and there was much complaint along the Southern Minnesota of combinations of grain buyers. This was another case in which the road was

[1] Louis Grieser *v* Chas. McIlrath, *op cit*, pp 340-341.

[2] *Ibid.*; Report of a legislative investigation of the Southern Minnesota Railroad, in *Minn Senate Jour*, 1874, p 564

[3] *Minn. Senate Jour.*, 1874, p 559; *Chatfield Democrat*, Aug 31, 1872, p. 3

[4] *Preston Republican*, Oct 14, 1872, p 2

[5] *Minn. Senate Jour*, 1874, p 564

forced to interfere in the grain trade in order to increase its traffic Whatever justification the road may have had, it was creating a potential monopoly and assuming a position in relation to produce buying at its stations which was dangerous to the trade Easton's position was favorable compared with that of his competitors because he was the first to get cars in case of a shortage, the road assumed for him risks and costs which his competitors had to carry, he paid only 66 per cent of the actual freight charge collected from others, and the resources of the railroad and the size of his organization gave him means for securing the best possible market information [1]

Mr Easton occupied a commanding position in the grain trade along the Southern Minnesota Although he was by no means the only buyer on the road, he was able to maintain a fair amount of control [2] At small stations he had no competition, at the larger ones there was considerable [3] But even at these larger markets he had some influence in maintaining a high margin [4] Although there were undoubtedly improvements in the market as a result of Easton's system, his monopoly became as much an object of criticism as the wheat ring had been The arrangement was discontinued in 1874 when the court decided that those who had been forced to pay regular rates were entitled to recover from the railroad a sum equal to the excess of their freight payments over Easton's [5]

A different arrangement was made by the St Paul and Pacific In 1866 William Litchfield made a contract with

[1] *Minn Senate Jour*, 1874, pp 557-559, Louis Grieser *v* Chas McIlrath, in *Minn Ex Docs*, 1877, vol. ii, p 341

[2] *Ibid*, p 564 Easton handled one third of the wheat carried by the road in 1873

[3] Louis Grieser *v* Chas McIlrath, *op cit*

[4] *Minn Senate Jour*, 1874, pp 553-565

[5] Louis Grieser *v* Chas McIlrath, *op cit*

the road whereby he should provide storage facilities at the stations In return for this, he was given for ten years the exclusive privilege of receiving, storing and shipping grain at a fixed charge on the whole length of the first division and for the whole road at St Paul, St Anthony and Minneapolis In 1868 Commodore Davidson bought Litchfield's elevator system and organized the Delano, Davidson and Kyle Company By 1874 this company controlled 36 of the 37 elevators on the road and was receiving 4 cents a bushel for handling wheat through its local and terminal elevators Anyone shipping wheat was required to pay Davidson the elevator charge whether or not the elevator was used, and no one else was allowed to build elevators[1] This elevator system was the first line system in the state, but it differed from later lines in that it was interested merely in storage and not in the buying of grain[2]

This arrangement was made by the railroad in order to get storage facilities at a time when there was no local capital for building elevators The charge of the Davidson Company for its services was considered fairly reasonable by those who shipped through elevators But farmer shippers and track buyers who loaded directly on cars objected to paying a charge for which they received nothing Monopoly control of storage also made it possible for the elevators to interfere in the wheat trade by favoring certain buyers in storing and shipping The potential evils in this respect were significant Furthermore, the Davidson group did not supply sufficient storage, so that farmers were often obliged to wait several days before unloading, because of congestion at the elevator Millers of Minneapolis were

[1] *Report, Spec Joint Rail Inv Com to Leg of Minn*, 1871, pp 9-10, report of a committee on railroads in *Minn House Jour*, 1874, pp. 234-236

[2] Federal Trade Commission, *Grain Trade*, vol i, p 77

willing to build but were refused sites by the railroad [1] The fact that the road granted privileges to this elevator system in the earlier years was reasonable enough, since Litchfield and Davidson were entering a section where the grain trade was small and undeveloped and where the future was uncertain But it was less justifiable to allow the continuance of the arrangement after the trade had increased beyond the point where the one company was able to handle it

The organizing of Minneapolis millers for buying wheat in country markets denoted the entrance of Minneapolis, as a considerable factor, into the wheat trade of the state and also marked the first pooling of Minneapolis wheat buying The Millers' Association was organized in 1867 for the purpose of reducing the expenses of buying wheat and facilitating its transportation to the mills [2] Minneapolis was at the time in a bad position, for the wheat area was to its south and southwest, where local mills and the influence of Chicago and Milwaukee buyers were strong The association gave the Minneapolis millers strength in meeting competition and in eliminating competition among themselves The association had thirty buyers in 1868, one at each station of the Iowa and Minnesota road to the Iowa line and up the St Paul and Sioux City to New Ulm [3] The wheat of all but one firm was gathered in the Union Elevator at Minneapolis and was distributed among the nine members of the association according to the capacity of their mills, charges being apportioned in like manner [4] It was said that the strong competition southwest of Minneapolis made

[1] *Minn House Jour, op cit*

[2] *Minneapolis Tribune*, Jan 7, 1868, p 3

[3] *Ibid*

[4] *Ibid* The Union Elevator, built in 1867, had a capacity of 130,000 bushels

the millers abandon their buying as an association [1] But by that time they were securing much wheat along the St Paul and Pacific F P Delano, of the Delano, Davidson and Kyle Company, and C A Pillsbury, a Minneapolis miller, testified in the senate investigation of 1874 that the millers in Minneapolis got most of their wheat from the St Paul and Pacific and that they bought almost all marketed there [2]

The influence of the Duluth route is seen in the Union Improvement and Elevator Company of Minnesota, which was organized in 1871 with a capital of half a million [3] Three elevators were built at once, at Hastings, Stillwater and Duluth [4] Grain was shipped to Stillwater by river and from Stillwater to Duluth via the Lake Superior and Mississippi This company undoubtedly secured rebates from the railroad, with which it was affiliated through at least one of its officers, Jay Cooke, Jr [5] Newspapers expressed a common attitude in Minnesota in saying that the company did not propose to carry out any philanthropic measures for the amelioration of the condition of Minnesota farmers [6] However, the influence of the Duluth route and of Duluth interests was one of the factors accounting for the existence of satisfactory markets on the river

Other railroads participated to a lesser degree in the grain trade The Iowa and Minnesota division of the Milwaukee owned or controlled elevators at its stations, but it

[1] *Minneapolis Tribune*, Jan 7, 1868, p 3, Shutter, F M, *History of Minneapolis* (Chicago-Minneapolis, 1923), p 357

[2] *Minn House Jour*, 1874, pp 234-236, *Minneapolis Tribune*, Jan 7, 1868, p 2

[3] *Owatonna Journal*, Sept. 7, 1871, p 2

[4] *Hastings Gazette*, Jan 13, 1871, p 1 The elevator at Duluth handled about a million and a half bushels the first season

[5] The Northern Pacific leased the L S and M

[6] *Lake City Leader*, quoted by the *Owatonna Journal*, Sept 15, 1871, p 2.

charged regular rates for receiving, storing and shipping on the company's cars The St Paul and Sioux City found it necessary to provide a number of elevators, these were managed by its local agents As on the Winona and St Peter, no elevator charge was made on this road but was included in the freight charge [1]

Arrangements and organizations like the above marked the coming of strong middlemen into the wheat trade in Minnesota These occupied an advantageous position because of their relations with the railroads The object of the roads in granting favors was often to secure a maximum of traffic in competition with other roads But privilege entailed a distinct danger in the wheat market It did not drive out all other buyers, nor was shipping by farmers, themselves, unknown The fact remains that privilege gave the favored middleman potential control These middlemen organizations were not, however, without value to the farmers They brought a more highly developed system into the local market by their more skilful management, more accurate market information, larger capital reserves and by the practice of shifting risks to primary markets The immediate value to the farmer of this system depended on the extent to which its economies resulted in relatively higher prices

Comparison of local prices with the prices in New York, an export market, indicates that middleman costs were narrowing at this time and that the part of the export price received by the farmers of Minnesota was increasing, though the variations from season to season and from year to year were considerable

[1] *Report, Spec Joint Rail Inv Com to Leg of Minn*, 1871, pp 14 and 17, *Minneapolis Tribune*, Feb 17, 1871, p 2

PRICE OF NO. 1 SPRING WHEAT IN MINNESOTA AND NEW YORK[1]
1868–1875

Year	Percentage of New York Price		New York Price
	Rochester	Winona	
1868	65.0	71.3	$2.148
1869	55.6	62.6	1.519
1870	57.6	63.2	1.293
1871	61.1	69.8	1.517
1872	62.3	69.6	1.616
1873	60.1	67.4	1.555
1874	67.0	73.0	1.350
1875	69.7	80.0	1.236

The comparatively low percentage from 1869 to 1873 is significant. The high percentage in 1868 is largely attributable to the high price in New York. The figures for 1874 and 1875, in spite of low prices in New York, are in part explained by the competition for freight between railroads and between the lake and the rail routes from Chicago to the seaboard. But even in other years the gains were considerable, as is seen in comparing the table above with that on page 53.

A part of the decrease was due to the fall in transfer and transportation charges, as noted in Chapter III. Other costs were also changing. The New York annual average price minus the corresponding price at Winona and transportation charges left a smaller margin to cover other costs than was the case in earlier years.[2] In 1870, 1872 and 1874 this margin was 4.02, 9.08 and 6.2 cents, respectively.[3]

[1] New York prices for Milwaukee Club in *Report, N. Y. Prod. Exch.*, 1880, p. 430. Winona prices for no. 1 spring obtained by averaging by months the quotations for that grade in the *Winona Weekly Republican*, Rochester prices for no. 1 spring obtained in like manner from figures in the *Rochester Post*.

[2] *Cf. supra*, p. 53.

[3] Note that these margins were calculated from annual average prices and from the nearest average transportation charge obtainable. Since it was impossible to get figures in different markets for identical days, such an average had to be used.

This indicates that costs other than transportation charges had also fallen That is, risks and uncertainties, charges of labor and management, and insurance and interest costs were less than in the river period

The difference in prices at the beginning and at the end of the marketing year (September to August) was somewhat high, although this, too, had become smaller than formerly [1] From 1868 to 1875 the average price in Rochester of no 1 wheat was 85 2 cents for the months from September to December and 98 from May to August, inclusive [2] In other words, there was a gain of 12 8 cents in holding wheat from fall to early summer In no year was there a loss, in some years the gain was negligible, generally, it was so large as to make it profitable to hold grain

This increase in price from fall to summer—the carrying price, as the gain was called—made it desirable for both grain buyer and farmer to retain ownership of their wheat until the last part of the marketing year Some grain was stored on the farm But many farmers, having borrowed much of the capital with which to start farming, were too hard pressed for money to be able to hold their grain, and loans could not be secured on grain stored on the farm [3] Some wheat was placed in warehouses and elevators in the towns at a storage charge of 3 or 4 cents [4] There were, however, certain difficulties in storing Where loans could be secured on grain in store, interest rates were high [5] In

[1] *Cf supra*, p 53

[2] Averages for seasons obtained by averaging weekly quotations for the months concerned, as given in the *Rochester Post*

[3] *Minn Senate Jour*, 1874, p 237

[4] Of 70,000 bushels in store at Rochester in 1869, 30,000 belonged to farmers, 150,000 bushels were said to be on the farms near Rochester But this was not representative of all markets (*Rochester Post*, March 27, 1869, p 3), *Report, Spec Joint Rail Inv Com to Leg of Minn*, 1871, *passim*

[5] Information secured from a man who was in a bank at Rochester

many places elevators were so unsafe that those who stored faced loss from fire or bankruptcy[1] It was this very difficulty which railroad and line elevators tended to overcome, for with their large financial resources and their safer business methods they were more dependable[2] The practice of mixing stored grain of different grades, in order to raise the grade of the wheat owned by the elevator, made it uncertain whether the same grade of wheat would be delivered as was placed in store Such difficulties in storing and in securing loans made most farmers sell their grain early in the season and tended to concentrate the grain in the hands of middlemen who had larger financial resources

The greatest legitimate gain of grain buyers was that made in holding wheat for a part of the marketing year This was, however, noted with suspicion by the farmers They felt that the price was purposely depressed when they sold their grain after harvest and that the rise later was also directed by the grain men Though corners and speculation on exchanges at times influenced prices, it is more probable that the reason for such a regularly large margin

in those years Material on interest rates is hard to secure and is rather intangible when it is gotten Rates are given as 3 per cent a month, 25 per cent a year, 8 per cent on farm machinery credit, etc But the kinds of security and other conditions on which the loan was made are not given For one case of a loan on wheat in store, see *17 Minn*, pp 287-289 and 534 Interest in this instance was 12 per cent

[1] In the case of Patrick Rahilly *v* Wilson, U S Circuit Court, it was decided that elevator receipts held by farmers against a bankrupt elevator at Lake City gave the farmers no claim on the wheat in store except as a bankrupt's dividend The *Minnesota Record*, Dec 27, 1873, p 2, commented that this left a depositor in the hands of elevators at a time when the latter were very subject to failure

[2] The *Minnesota Record*, Jan 3, 1874, p 2, stated that loans on grain in Van Dusen's elevators carried lower interest rates than did mortgages (evidently on real estate) This indicates one value of the strong middlemen whom the farmers feared so much.

is found in the undeveloped condition of the wheat trade in those central markets

There was one marketing cost which could not be measured That is, the amount made by middlemen through short weighing, improper grading and too high dockage If no 1 wheat were wrongly graded 2, the farmer would lose from 5 to 10 per cent of the value of his load Even though grain buyers tried to be honest, they were almost forced to grade too strictly rather than too loosely, for, since grades and methods of grading were not clearly standardized, it was possible that the local buyers' grades would not coincide with those in primary markets—for their own protection the buyers shifted that risk to the farmers It is also certain that at this time the losses of the farmers were increased by deliberately dishonest grading The same was true of weighing It was difficult to keep scales in order, and buyers would avoid the possibility of short weighing themselves by weighing closely But also in weighing, the opportunity often led to considerable deliberate dishonesty and irregularity [1]

The most significant factor determining the local price was the price in the primary markets The former was becoming more sensitive to the latter than it had been in the river period [2] Even so, the difference between the two was far from constant and fluctuated very considerably The

[1] The price of no 2 wheat was from 5 to 10 per cent less than that of no 1 The *Preston Republican*, Oct 3, 1873, p 2, quoted the *St Charles Times* to the effect that several local farmers who had shipped to Chicago and Milwaukee had in every instance received payment for no 1 wheat which would have graded no 2 locally *Cf Report, Minn Rail Com*, 1882, in *Minn Ex. Docs*, 1882, vol iii, p 267 Some of this information was gained by the writer from men who were familiar with conditions described

[2] Grosvenor, "The Railroads and the Farms," *Atlantic Monthly* (1873), vol xxxiii, p 32

two prices were in closer agreement, as a rule, in spring and summer than in fall and winter

The price of wheat fell in 1869 and 1870, a fall from which it did not again recover by 1875, as is shown in the following table

AVERAGE ANNUAL PRICE OF NO 1 WHEAT, ROCHESTER, 1868–1875[1]

1868 .	$1 397	1872	$1 008
1869 .	0 845	1873	0 935
1870 .	0 746	1874	0 905
1871	0 922	1875	0 862

The value of the Minnesota farmers' wheat was further decreased in 1870, 1871 and 1874 by poor crops The average wheat yield was 15, 12 and 14 bushels an acre for these years, and for the other years from 1867 to 1875 the yield was about 17 bushels The quality was also generally inferior to that of wheat raised earlier[2] No 2 wheat, which was from 5 to 10 cents below the price of no. 1, became common

The changes in the wheat market opened serious questions concerning the wheat industry and trade. Falling wheat prices were looked upon as a cause of the prevailing hard times But there were different explanations of the decrease in prices, ranging from the one which emphasized overproduction of wheat and a resultant fall in

[1] Average calculated from weekly prices of no 1 spring in the *Rochester Post.*

[2] *Report, Minn Com of Statistics*, 1876, p 27 Also, *U S. Dept Agric, Div Stat, Bul. 57*, p 30 The poor crops of 1870 and 1871 were due to adverse weather conditions. *Report, Minn Com of Statistics*, 1871, pt ii, p 632 In 1874 the weather was unfavorable, and grasshoppers destroyed the crop more or less in twenty-eight counties. *ibid*, 1875, pp 21 and 23, and 1876, p 21, *Farmers' Union* (July, 1874), vol viii, p 212, *Anti-Monopolist*, Aug. 20, 1874, p 4 The grasshoppers remained for three years Lamphere, "History of Wheat Raising in the Red River Valley," *Minn Hist Soc Coll*, vol x, pt ii, p 8, *Governors' Archives*, files no 40 and 58, Library, Minnesota Historical Society

the world market to the other extreme which saw the farmer in the grip of middleman monopolies which waxed rich from his toil

Those who emphasized overproduction either pessimistically asserted that there were too many farmers in the world, advocated a careful study of supply and demand of various products so as to bring about a closer adjustment to the market, or supported a complete change from wheat farming to diversified agriculture with emphasis on the home market They generally believed the best regulator to be competition In this group were many middlemen, a majority of the newspapers of the state, one unsuccesful farm journal and a few farmers who were successful in dairying or who feared depletion of the soil by constant wheat cropping

The efforts of the overproductionists to decrease wheat farming were not successful at the time In 1860 the wheat acreage had been 53 38 per cent of the tilled area, in 1868 it was 61.86 per cent and in 1874, 66 25 per cent [1] There were certain conditions which made it difficult, if not impossible, to change from one-crop farming [2] A very signi-

[1] *Report, Minn Com of Statistics*, 1876, p 26

[2] There was undoubtedly a need of greater diversification in some localities and on the part of certain individuals But nothing is more striking in regard to Minnesota's agricultural problems at the time than the failure of newspapers, farm journals and others, who advised the farmers, to recognize the marketing problem of the region Newspapers carried farmers' columns which consisted of clippings from eastern journals in localities having production and marketing conditions vastly different from Minnesota's An explanation of this failing of the papers is suggested by a letter in the *Donnelly Papers* from O Gibbs, a newspaper man, to I Donnelly, dated July 24, 1874 "You must have an agricultural department in your paper [the *Anti-Monopolist*] to make it take with the Grangers Any city chap who is handy to sling ink will answer to edit this department Attend to this right away, for it is time to tell the farmers *when to cut their wheat, and which end of the stack to begin on when the*[*y*] *thresh* [italics author's], and what price they can get for their crops, etc.".

ficant problem was that of a market. The much-hoped-for home market did not appear, for the expectation of decreasing the distance between the farmer and his market by bringing the producer and the consumer together was realized slowly. Perishable products could not be shipped regularly to a distant market before methods of refrigeration in transit were invented.[1] Corn and other bulky products could not bear a transportation cost which was high relatively to their value.[2] Wheat, therefore, remained the great commercial crop of Minnesota.

Those who emphasized the market process suggested the cutting of marketing costs. They held that wheat was the only paying crop of the frontier, even though its price were low, and that the only solution of their difficulties was found in cheaper marketing.[3] There were two distinct groups of opinion in regard to this question. The more conservative held that the middleman system was inefficient because of inherent difficulties which should be attacked carefully and moderately; the more assertive group was composed of those who looked upon the system as a great fraud and monopoly which destroyed competition. The remedy, said the latter, was to resort to control in order to establish competition. Among this group were many farmers in the Grange, political groups of the liberal and opposition ele-

[1] The *Farmers' Union* (1873), vol. vii, p. 289, announced that refrigerator cars were to be installed on Minnesota railroads in 1874, making it possible to ship butter to the East.

[2] The *Report, Sel. Com. on Transp. Routes to the Seaboard*, 43rd Cong., 1st Sess., *Senate Reports*, no. 307, vol. i, app., p. 127, gives a table illustrating this point; also, Poor, *Manual of Railroads*, 1869-70, p. xxxii, and table in *Internal Commerce of the United States*, 1891, pp. xxiii-xxiv.

[3] Abernathy, W. J., editor of the *Farmers' Union*, considered overproduction the cause of low wheat prices in central markets but thought the reduction of marketing costs the only remedy for the West (*Farmers' Union* (July, 1874), vol. viii, p. 213).

ments, a few newspapers, especially the *Anti-Monopolist* and the *Farmers' Union,* some professional and business men who sympathized with the farmers or saw their own town suffer from discrimination, a few unfortunate grain dealers and a handful of political messiahs, of whom Ignatius Donnelly was the greatest

The economic ideas of the farmer element of the anti-monopoly group are interesting and significant in this relation Fundamentally, these marked the appearance of a strong farmer class consciousness which expressed itself in magnifying the importance of the farmer to society and in minimizing the services of the middleman One farmer typified this idea when he wrote that the "farmers—the producing class—are the vital forces that supply the state and nation with life" [1] Washington, Webster, Cato, Virgil and others were quoted to prove that agriculture was the most healthy, the most useful and the most noble employment of man The middleman, on the other hand, was a sort of a usurper who was displacing the farmer and destroying the cornerstone of society, "which stone is the producing class, who raise from mother earth the wealth of the world" [2] The middleman was commonly pictured as living in comfort and luxury from the proceeds of the toil of the farmers [3] He was usually the local grain buyer, with fur gloves and cigarettes, but at times he was a mythical person who symbolized the heartless monopolies and soulless corporations, the wheat rings and the railroads The farmers' cause was justified on the basis of brotherhood, as well as on merit: "We are of one common brotherhood, having one common

[1] *Anti-Monopolist,* Aug 6, 1874, p 3

[2] *Farmers' Union* (Oct, 1873), vol VIII, p 333

[3] An interesting poem in the *Farmers' Union* (May, 1873), vol VIII, p 164, contrasts the luxury of the middleman and the hardships of the farmer But the middleman was not admitted to heaven!

Father, and why should we not all sit at one table of brotherly equality, every one sharing according to his true merit, as guaged by the balancing weights of production and consumption "[1]

The middleman's services were not wholly denied It was perfectly obvious that railroads were necessary But it was not so obvious that they were entitled to the large gains which it was thought they received The importance of other middlemen was less evident Many aspects of the marketing system were comparatively new at the time and were understood by but few And for frontiersman of generations which had persistently moved west, thus avoiding the degree of economic organization developing in the older sections, and for emigrants from town communities of the old world it was difficult to comprehend a metropolitan system of trade They saw the farmers' power as a bargainer disappearing but they did not so clearly see accompanying changes They thought the very tyranny they had tried to escape pursued them in a more menacing form

Specific conditions in the market were attacked by the various groups and interests favoring reform The control which Chicago and Milwaukee had over Minnesota's wheat trade was attacked These cities were regarded as robber barons exacting their tribute from the wheat on its way to market, through storage and transfer charges, grading, weighing and so-called speculation A great deal of this opposition was justified, considering conditions in the markets;[2] but some of it grew out of the common failure to understand the function of a primary market Market

[1] *Farmers' Union* (Jan, 1873), vol vii, p 3 The *Farmers' Union* became a farmers' forum where everyone could state his views

[2] *Cf supra*, pp. 69-70 In 1874 the *Anti-Monopolist* and the *Farmers' Union* severely attacked Chicago and Milwaukee speculators and false market reports.

reports were generally looked upon with suspicion, which was also justified in part by the extensive manipulation of such information by speculators.[1] The larger local buyers were denounced as wheat rings and thieves. But the railroads were regarded as the principal cause of marketing difficulties. They were thought to have charged more than a just and legal transporation rate, especially from non-competitive points and from a large number of shippers. And, above all, the roads were said to have destroyed competition by their discriminations favoring certain wheat dealers in local and central markets. As a result of these conditions there was a widespread feeling in Minnesota that the farmers were not gaining the full profit due them from the wheat they raised, because of the exactions of middlemen. Conscious efforts were made from 1869 to 1875 to lower marketing costs. These efforts looked toward the restoration of the farmers' power in the market through a better knowledge of market conditions and of prices, through farmers' marketing organizations and by means of legislation for curbing the power of monopolies and for reestablishing competition in the markets.[2]

Very little was done toward increasing the farmers' market information beyond emphasizing its importance. The Granges did what they could to get information on crops, demand, supply, prices and markets for grain. No

[1] *Farmers' Union* (Aug., 1874), vol. viii, p. 252; *Minnesota Monthly* (Sept., 1869), vol. i, p. 314.

[2] The fact that very little was said about currency is significant. In 1869 there was some suggestion of increasing greenbacks as a means of raising prices. But until 1875 the preponderating influence was with the hard money element, which saw inflated currency as an evil at a time when wheat was sold on a non-inflated world market while the price of what the farmers bought was affected by a high tariff and inflated currency. The anti-monopoly movement was against a high tariff in 1874 as is indicated by frequent attacks on the tariff by the *Anti-Monopolist*. In 1875 the greenback agitation began.

state nor federal agency existed for disseminating crop information or market quotations The only agency which served with any regularity in this matter was the newspaper, and its information was not particularly reliable and was often old before reaching the farmer [1]

An interesting development appeared in the attempts at organizing farmers for marketing their own produce In 1869 the *Farmers' Union* suggested that they store their own grain, advance money on grain in store and bargain for freight At the same time the other farm journal of the state, the *Minnesota Monthly*, carried articles on cooperation, including one on English cooperatives [2] The first farmers' marketing organization in the state was started by a group which was most probably not influenced by these journals At some time between 1866 and 1869 a number of Scandinavian immigrants, who had settled in Vasa Township, Goodhue County, organized the Scandinavian Transportation Company of Red Wing This company stored and shipped for its members and for others, its principal object being to furnish cheap transportation [3]

A number of elevators and mills were started after the middle seventies by Grange organizations The mills were profitable at first in the sense that they paid fairly good prices for the Grangers' wheat, but the elevators seem, on the whole, to have been less satisfactory [4] Both were even-

[1] *Cf supra*, p 80, note 2

[2] *Minnesota Monthly* (Dec, 1869), vol 1, pp 420-429

[3] Mitchell, W H, *History of Goodhue County* (Minneapolis, 1869) p 130, *Goodhue County Republican*, March 3, 1870, p 2 It is interesting to note that in 1865 sixty Scandinavian farmers of Vasa organized the "Vasa Farmers' Union" to conduct a store Another was organized a little later in the same township

[4] The mill at Faribault was organized in 1874 but burned a little later *Northwestern Miller*, Nov 17, 1876, p 2. La Grange mill at Red Wing was organized in 1877 *Grange Advance*, Feb 17, 1877, p 4 A Grange

tually closed or sold to individual proprietors The difficulty in securing managers and capital was a real one for Grange organizations[1] They also suffered, like other small grain dealers, from unfavorable discrimination on the part of the railroads And the fact that the Granges weakened or disappeared was a final blow to Grange elevators, the last of which appears to have been discontinued in 1878[2]

The possibility of forming a farmers' wheat pool was even suggested, the plan being to pool the wheat of the northwestern states through the Grange in such a way as to "corner" their own wheat.[3] This idea was, of course, visionary for the time The farmers had neither the capital, the market experience nor the organization for such an undertaking

The movement for market reform was primarily interested in legislation as a corrective measure Ignatius Donnelly expressed its attitude in his characteristic way of saying what the people were unconsciously thinking

They begin to see clearly that all the evils they suffer arise from the laws, either the laws are against them, or they are silent when their interests are at stake, and they perceive that

mill was built at Waterford, Rice County, because the farmers thought Ames and Archibald were making too high profits on their milling· Rogers, *Minn Hist Soc Coll*, vol x, pt 1, p 40 The writer knows of farmers who mortgaged their farms heavily in order to pay the debt of the Waterford Mill, which failed

The writer was unable to secure much information on Grange elevators, which indicates that they were not very numerous Since neither local nor state records of the Grange, except a few in private hands, are available for research, the writer found it necessary to depend on interviews and newspapers for information

[1] *Pioneer Press*, Feb 7, 1878, p 1, *Farmers' Union* (Feb, 1874), vol viii, p 44, interviews

[2] Information from conversation with a man who had charge of a Grange elevator

[3] *Anti-Monopolist*, Sept 24, 1874, p 8

nearly all their wrongs must be righted at the ballot box or not righted at all [1]

The movement for regulation began to gather force in 1869 [2] The problem was considered almost exclusively a railroad problem In his inaugural address, January, 1870, Governor Austin recognized this by reciting the complaints of shippers and the defense put forth by railroads He suggested that an investigation be made by a commission which should propose legislation, if popular complaints were substantiated [3] No definite action was taken on the suggestion of the governor [4] But a law was passed which forbad railroads to collect elevator charges from persons not using the elevator of the road and which prohibited distinctions against persons shipping otherwise than through the company's elevator [5] This law was never effective.

In the summer of 1870 the railroad question became a campaign issue Feeling was especially marked in the southeastern section of the state comprising the first congressional district In that locality interest in the construction of roads had given place to the question of rates and services, while the rest of the state, principally the second district, which was clamoring for more roads, feared that interference might hinder construction [6] Though this movement was generally supported in the first district regardless of party, a leading position in determining the sentiment behind it was taken by the Grange, which was, however, not poli-

[1] *Chatfield Democrat*, June 21, 1873, p 2

[2] *Appleton's Annual Cyclopedia*, 1869, p 454 The People's Party was one part of the element favoring reform

[3] *Minn Ex Docs*, 1869, pp 6-9

[4] *Minn Ex Docs*, 1870, pt i, p 39

[5] *Minn Gen Laws*, 1870, ch 28.

[6] Saby, *Rail. Leg. in Minn*, p 90.

tically active as an organization The Republicans in convention at Owatonna declared their opposition to the tendency toward consolidation of railroad lines and to extortionate rates and discrimination, which defeated competition in the wheat trade [1] The spirit of the meeting showed that the Republicans had taken up the fight against railroads Governor Austin, who favored strong action, spoke in no mild terms of "the extortions and burdens imposed by the merciless, greedy monopolies and soulless corporations".[2] In December a meeting was held at Rochester, which claimed the distinction of being the birthplace of the anti-monopoly movement, to protest specifically against the Winona and St Peter and generally against wheat rings and railroad monopolies [3] Resolutions were adopted which requested the legislature to enact laws to secure uniform freight rates, to abolish the system of wheat grading in use, to prohibit roads from owning elevators and to prevent railroad consolidation [4] A petition with the same requests, signed by 2,000 voters of Olmsted, Winona and Fillmore counties, was received by the legislature [5] The sentiment of the strongest section of the state was thus shown to be overwhelmingly in favor of regulatory action

The legislature of 1871 was ready to act The beginning of Granger legislation was made by the passing of two laws one to provide for a railroad commissioner to investigate and to report to the legislature, and the other, "An act to regulate the carrying of Freight and Passengers

[1] *Minneapolis Daily Tribune*, July 7, 1870, p 1, *Appleton's Ann Cyc*, 1870, p 510

[2] Quoted from *St Peter Tribune*, Oct 26, 1870, p 2, by Saby, *op cit*

[3] H H Young of Rochester to I Donnelly, Nov 20, 1870, *Donnelly Papers*, *Record and Union*, July 10, 1874 p 3, *Rochester Post*, Dec 3, 1870, p 3

[4] *Ibid*, *Federal Union*, Dec 3, 1870, p 1

[5] *Minn House Jour*, 1871, p 52

on the Railroads of the State"[1] This act, known as the Jones bill, classified freight and fixed maximum freight rates, the carload charge on wheat being 6 cents a ton a mile for 20 to 50 miles, 4 cents for from 50 to 100 miles, and 3½ cents for more than 100 miles Additional charges were allowed for less than carload shipments The act also declared all railroads in the state public highways To prevent discriminations against certain shippers, the act stated that the roads should receive all freight brought for transportation and should in no way discriminate between warehouses[2] Another act prohibited the mixing of better grades of grain in store with inferior grades without the owners' consent[3] These acts dealt with problems which were very significant to the wheat trade But their effectiveness was still to be determined

The legislation of 1871 was practically disregarded by the railroads The only act which proved to be of any particular significance was the Jones bill for the regulation of freight charges If the importance of this law were measured by its immediate effects, it would merit little attention To the roads it was a very significant measure, for above any question of rates or existing difficulties was the fact that it meant public, legislative control of the roads, which generally claimed exemption from such control on the basis of their charters The companies, expecting that the law would be held unconstitutional, or that the legislature would modify it, and not fearing the fines imposed, without exception refused to conform to the law Coercion was difficult, for private individuals hesitated to incur the expense of litigation and to arouse the opposition of the roads Furthermore, the only ones who had adequate in-

[1] *Minn Gen. Laws*, 1871, chs 22 and 24.

[2] *Minn Gen. Laws*, 1871, ch 24, secs. 1, 4 and 8.

[3] *Ibid*, ch. 26

formation for undertaking action were often middlemen who were favorites of the roads[1] But action was finally brought against the Winona and St Peter by J D Blake, a merchant of Rochester In this case, J D Blake *v* the Winona and St Peter Railroad Company, the law was declared unconstitutional by the lower court But it received a favorable decision in the state supreme court[2] On a writ of error the case was brought to the Supreme Court of the United States as one of the Granger Cases Chief Justice Waite gave as the opinion of the court that the road in question was as a common carrier bound to carry, when called upon for that purpose, and to charge only a *reasonable* compensation for the service[3] The significance of this decision lay in the recognition of legislative control of railroads, though it was understood that legislation could not controvert provisions in railroad charters which exempted roads from control Legally, the success of the act was thus established But before the determination of its constitutionality, the law was found ineffective and was finally repealed The old evils persisted and complaints were more numerous than ever

The rate war of the Milwaukee and the Duluth road, together with persistent disregard of the legislation of 1871, fanned the anti-railroad sentiment, which had been quiet in 1872[4] A common attitude among the farmers was ex-

[1] *Report, Minn Rail Com*, 1871, pp 10-11, address of Gov Cushman K Davis, *Minn Ex Docs*, 1873, pt 1, p 11 The *Report, Minn Rail Com*, 1873, pp 50-51, stated that discriminations between persons and places continued to be the rule

[2] *19 Minn*, pp. 419-427

[3] *94 U S*, pp 180-181 In this decision a provision in the state constitution and a railroad act which stated that reasonable rates should be charged were said to have no effect on the road in question

[4] *Cf. supra*, p 77, *Report, Minn Rail Com*, 1871, pp 1-11, *Appleton's Ann Cyc*, 1872, p 543

pressed in a letter from a member of an Olmsted County Grange, who saw in the railroad the cause of the "well known fact that the farmers of the northwest have all they can do to keep body and soul together" and suggested the organization of Granges for relief[1] The political expression of this sentiment, the Anti-Monopoly Party, was organized in 1873[2] Though its candidates were endorsed by the Democrats and though it had strong support in the older sections of the state, the Anti-Monopoly Party was defeated in the election of 1873[3] But it probably forced the Republicans to nominate a known sympathizer with the Grangers for governor and to adopt the anti-monopoly movement as its own[4]

The railroads, on the other hand, were having their difficulties The western roads were said to be unprofitable The railroad commissioner reported that only one road in the state, the river division of the Milwaukee, was remunerative, and of the others two were in the hands of receivers, three defaulted in interest on their debt, two funded their interest and the rest assessed stockholders Light traffic in the western and northern parts of the state was recognized as a cause of the unremunerative condition of these roads—a fact which aggravated the effect on them of the general depression of 1873 and 1874[5] The railroads charged that the opposition of the farmers had shaken public confidence in railroad investments and had caused the panic They were answered that fraud in railroad finance and wars between the roads were the true causes[6]

[1] *Farmers' Union* (March, 1873), vol vii, p 93

[2] *Appleton's Ann Cyc.* (1873), vol xiii, p 511.

[3] Haynes, F. E, *Third Party Movements* (Iowa City, 1916), p 55

[4] Saby, *Rail Leg in Minn*, p 134

[5] *Report, Minn Rail Com*, 1874, p 6

[6] Saby, *op cit*, pp. 131-132

Neither the railroads nor their opponents were in a mood to proceed reasonably The former feared interference by legislation, which they thought would inevitably be unfavorable to them Considering the temper and the inexperience of the people and the conditions under which the roads were operating, it must be admitted that they were in a difficult position But they assumed an independent attitude which refused to recognize any obligation on their part toward the trade they served, and they were unwilling to give information which would help in the solution of the problems affecting themselves and the public Those who opposed the roads were, on the other hand, not without fault They had located to their satisfaction the cause of their difficulties, and that cause was one which lent itself more easily to emotional enthusiasm and to demagogism than to reason The farmers had the common failing of wanting a single explanation. the inequality and irregularity of rates and the uncompromising attitude of the roads provided the solution of the search for a cause. That allocation of the source of the trouble was largely justifiable, but, had the farmers been intelligently critical of the various agencies and forces influencing their condition and of the railroads' problems, they would have had a sounder basis on which to work in improving the situation

Saner counsels prevailed in the legislature of 1874 The experience and the ideas which had developed in the handling of the railroad problem since 1870 provided a more promising basis for further legislation The law of 1871 was repealed [1] This law had failed because it was too arbitrary and inelastic and because no effective means of enforcement had been devised A new act was passed which aimed to overcome these difficulties

The act of 1874 prohibited all unjust discriminations

[1] *Minn Gen Laws*, 1874, ch 26, sec. 25.

against persons and places Discrimination in rates was defined as charging the same or more for a shorter than a longer distance in the same direction, charging more for the same class or quantity at one place than at another for equal distances in the same direction and charging more from one person than another for the same class, quantity or distance in the same direction, whether made by rebate, drawback or other means of evasion The terminal rate might be the same for shorter and longer distances, but it should not exceed a certain amount Discrimination in the furnishing of cars and in the receiving of freight was also forbidden Side tracks should be granted to owners of warehouses The act of 1871 which provided for a railroad commissioner was repealed, and provision was made for a board of railroad commissioners This board of three members was given the power to examine the books of railroads, to take testimony and to prosecute corporations or persons violating the laws They were directed to provide a schedule of maximum rates for each road doing business in the state and to revise the charges when necessary The schedules made by the commission were to be considered *prima facie* evidence that the rates therein fixed were reasonable maximum charges Finally, provision was made for bringing suit against the companies, and stringent penalties were set for the violation of the law [1]

The same legislature enacted several other laws which were significant to the wheat trade The consolidation of competing lines was forbidden [2] County treasurers were authorized to appoint a deputy sealer of weights and measures at each railroad station in their country [3] An attempt

[1] *Minn Gen Laws*, 1874, ch 26, secs 1, 4, 5-10, 19 and 24

[2] *Ibid*, 1874, ch 29

[3] *Ibid*, 1874, ch 74, sec 4. An earlier act somewhat similar was repealed by section 2

was made in a warehouse act to abolish some of the evils which had sprung up in regard to warehouses and elevators A maximum charge of 2 cents a bushel was set for receiving, elevating, handling and delivering grain in elevators of railroads, corporations, associations or persons engaged in the business of handling grain for others Grain inspectors were forbidden to purchase or ship grain If any railroad company should refuse to adhere to these provisions, they should allow anyone to erect and maintain warehouses at such stations, adjoining the tracks or side-tracks, without paying the railroads or other persons in the warehouse business at the station for the privilege of doing business [1] This act was aimed, especially, at the warehouse monopoly on the St Paul and Pacific The ways in which this, like most Granger legislation, was contravented will be seen in Chapter VI of this study

There were varying opinions concerning the railroad act of 1874, but its weaknesses became most apparent when the commissioners attacked the problem of schedule making They found the railroads in a very unremunerative condition [2] And they could secure little information which would direct them in making rates in keeping with the requirements of the law and the financial needs of the roads Opposition was met in the newer sections of the state, which feared that the law would result in the discouraging of investments for railroad extension Where the act disturbed the old competitive rates, opposition arose at once. An illustration is found in the case of Hastings, where the competitive rate on a bushel of wheat to Chicago had been 9 cents and the charge according to the schedule based on the new law was 27 cents This was cited by the *Anti-*

[1] *Minn Gen Laws*, 1874, ch 31, secs 1 and 2

[2] Saby, *Rail Leg in Minn*, p 153

Monopolist as an example of Republican reform.[1] The commissioners had a difficult task, for raising rates at competing points brought protests and lowering them at non-competing points to the level of the former would have cut ruinously the income of the railroads. Some objected to the schedules because the same rates were not made for all roads Minneapolis and St Paul, on the contrary, thought it unfair to charge the same rate between these cities as elsewhere, because the traffic was heavier there than between any other two points in the state [2]

The roads complied substantially with the schedule prepared by the commissioners, they lived up to it so strictly as to make the law unpopular at competitive points [3] Some roads also gave inferior services, which tended to create opposition to the law [4]

By 1875 the legislation of the previous year was generally thought to have failed, and Granger legislation was blamed for the general hard times in the state The country and city newspapers, alike, began to demand modification of the legislation But, according to Governor Davis, the statute had resulted in substantial elimination of discrimination [5] It seems likely that this attempt at legislation would have been effective had it been allowed to continue longer. But it came at a time of real hardship in some places and general depression everywhere, and it inevitably conflicted with interests, not only of railroads, but of shippers who were formerly beneficiaries of competition Many people

[1] *Anti-Monopolist*, Aug. 13, 1874, p 4

[2] *Record and Union*, Aug. 14, 1874, p. 2, *Report, Minn Rail. Com.*, 1874, p 8

[3] *Report, Senate Select Committee on Inter-State Commerce*, 49th Cong, 1st Sess, *Senate Report*, no 46, pt. 1, p. 109.

[4] Saby, *Rail Leg. in Minn*, p 155

[5] Annual message, *Minn Ex. Docs*, 1875, p. 2.

who had clamored for reform helped to kill the very measures they had demanded.

In 1875 the act was repealed and another was passed to take its place. This provided for a single railroad commissioner to investigate railroads and to report annually. The law forbad roads to discriminate between persons and places in any way, stating that all drawbacks or concessions of rates should be open to all, alike. No unreasonable charge should be made for transportation or storage. The roads should also furnish cars "when within their power to do so, and upon reasonable notice."[1] The mildness of these clauses is striking when compared with the earlier ones. No provision was made for enforcement, very little power was given the commissioner, and discrimination and other evils in transportation were again brought within the domain of private law, all prosecutions being required to proceed through civil action brought by the aggrieved party.[2]

"The Morse bill", said the *Minneapolis Tribune*, "virtually restores to the railroad companies the right to manage and control their own property."[3] This law was characterized as a virtual surrender to the railroads, as a piece of stupidity and folly, as an acknowledgment by the legislature that the attempt to fix rates had failed and as a "sham, a mockery, a delusion and a snare."[4] Thus the state had traversed the whole circle from non-regulation through varieties of regulation, and back to non-regulation. The railroad commissioner, with no power but that of public opinion and some ineffective statements concerning discrimination, remained.

[1] *Minn. Gen. Laws*, 1875, ch. 103, secs. 1-9.

[2] The act of 1874 had given the commissioners power to prosecute.

[3] *Minneapolis Daily Tribune*, March 5, 1875, p. 2.

[4] *Anti-Monopolist*, March 18, 1875, p. 4.

It is impossible to weigh the results of the legislation of 1871 to 1875 As direct attempts at reform, the laws failed There is no proof of any lasting effects on rates which are directly attributable to the movement What the effect may have been through the focusing of attention on the railway problem and through the widespread criticism which followed cannot be measured The farmers and others derived from it a better understanding of the railroad situation, the roads realized, as never before, the force of an enraged public One very significant result was the fact that the courts had upheld legislation for the regulation of the railroads, thus breaking the contention of the latter that they were exempt from public control

The above indicates the main features of the Minnesota wheat market from 1868 to 1875 The outstanding characteristics of the period were the appearance of large marketing agencies, popularly designated as monopolies, and the development of a farmers' movement, centering in the Grange, to curb the power of the middleman This movement, which attacked the railroad as the dominant factor in monopoly, succeeded in establishing the legal right of public control But most of the problems which it aimed to control remained unsolved

Marketing difficulties continued because they were not wholly subject to modification by law To some extent their appearance can be explained by the change in the relative power of the farmer and the middleman, legislation could help to restore the balance There were, on the other hand, certain economic considerations which no amount of pressure from the state or from political or economic organizations of farmers could control The liberal land policy of the government had encouraged the extension of agriculture and of railroads to a point where the profits of both were uncertain The railroads of the Northwest were built

in advance of the trade which should support them The agriculture of the region was forced to rely on a middleman system which was inefficient and which was very extensive because of the distance to market To decrease marketing costs, it was necessary to develop a home market or to improve the marketing organization, as well as to control the distribution of the gains thereby made through curbing the power of the middlemen

CHAPTER V

New Forces in the Market, 1876-1885

The years immediately preceding and following 1880 mark a transition point in Minnesota's wheat trade The center of wheat production shifted from the southeastern to the northwestern part of the state The main outline of the railway system was completed. Two new primary markets, Minneapolis and Duluth, rose to prominence The new-process milling, which was developed in the state, made a change in the relative value of winter and spring wheat in favor of Minnesota, the great spring-wheat state Lastly, the line elevator system became the dominating agency in the local markets

In those years the southeastern section of the state was losing its position of importance in the wheat trade Its wheat crops were failing both in quality and in yield in the late seventies, and the farmers began to raise a larger proportion of oats and corn [1] The market for dairy products and

[1] The decline became especially perceptible about 1880 In 1878 the percentage of tilled area in the state devoted to wheat raising was 68 78 (*Report, Minn Com of Statistics*, 1879, p 20 and 1894, p 8) The considerable decrease after that year was due to changes in the older section of the state The grasshopper raids of the middle seventies in the south central part discouraged wheat production (*Report, Minn Com of Statistics*, 1875, p 23, 1876, p 108 and 1880, p 32) The year 1878 is regarded, by those who lived at that time in the southeastern part, as the turning point of that section. They call it the chinch-bug year. Rust and blight were also destructive The reports of average yields as given in the *Annual Reports of the Com of Statistics* show a very low yield in 1878 The grade was also poor For the next few years the yield was low. Minneapolis millers and country millers began to depend more and more on wheat from the northwestern section.

livestock had so definitely improved that the change was not a hardship for the farmers[1] The process of change was slow, but a definite beginning in diversification was made[2] Supremacy both in the amount and quality of wheat raised was passing to the region bordering on the Red River[3] The rich virgin soil of that section proved to produce excellent wheat in large yields, and the cultivated area of the northwestern part of the state was extended considerably The shifting of the wheat area is illustrated by the location of leading counties in those years The eight counties raising more than a million bushels of wheat in 1875 were all in the section bounded by the Minnesota and the Mississippi rivers and the state of Iowa[4] Of thirteen counties producing over a million bushels in 1880, ten were in the southeast section, one, Stearns County, was northwest of Minneapolis in about the center of the state, and two, Ottertail and Polk, were in the Red River district[5] Of the five leading counties in 1885, one was Goodhue in the southeastern part, another was Stearns and the rest were Polk, Norman and Ottertail, in the northwestern region[6]

In spite of decreased production in the southeastern part, there was a total increase in the amount of wheat raised in

[1] The failure of the wheat crop was a blessing in disguise It helped to break the unreasoning confidence in wheat, which had grown up, and made the farmer turn to the production of those crops for which a market was being developed The home market, with its diversity of demands, began to supplant the distant wheat market, and new developments in refrigeration, packing and transportation made possible the marketing in the East of western dairy and meat products

[2] For the growing importance of oats, corn and livestock see the *Reports of the Com of Statistics*

[3] The no 1 hard spring which was raised there was the highest quality of spring Yields by counties are found in the reports, *op cit*

[4] *Report, Com of Statistics*, 1876, p 56

[5] *Ibid*, 1881, in *Minn Ex. Docs*, 1881, p 233

[6] *Minn Com of Statistics*, 1886, p 18

the state The acreage grew from 1,764,000 in 1875 to 3,043,000 in 1885[1] The average annual production of the five-year period from 1876 to 1880 was 30,086,110 bushels, and for the next five-year period 35,669,540[2]

The moving of the wheat area northwestward was accompanied by the extension of railroads The period of inactivity in railroad construction following the panic of 1873 ended with active resumption of building in 1877 During the year 1879 a number of lines reached the boundaries of the state The Southern Minnesota reached the Dakota line, the Hastings and Dakota was extended to Ortonville, only a few miles from Dakota, the St Paul and Sioux City reached the Dakota boundary near Iowa, the Minneapolis and St Louis was connected with a road extending into Iowa; and the St Paul, Minneapolis and Manitoba (St. Paul and Pacific) touched the Canadian and Dakota boundaries at St Vincent The long trunk lines which had been progressing for years were thus all completed within the state by 1879[3]

Other important changes in the railroad system of the state were also made by the building of connections and branches In 1884 the main line of the Northern Pacific was connected with Minneapolis by a line built from Brainerd Minneapolis secured another road to the West by a cut-off from the Hastings and Dakota. Almost all the roads were extended by the building of branch lines.[4]

Minneapolis secured additional rail connections with other primary markets. Its earlier dependence on the Milwaukee road for its trade with Chicago and Milwaukee disappeared.

[1] *Minn Com of Statistics*, 1886, p 18

[2] *U S. Dept Agric, Bur Stat, Bul* 57, p 30.

[3] *Report, Minn Rail Com*, 1879, pp 3, 49 and 122

[4] *Report, Minnesota Railroad and Warehouse Commissioners*, 1886, p 437

By consolidating and by filling in sections of road, a number of new routes to Chicago had been secured, of which the more important were the Burlington and Northern, the Chicago, St Paul, Minneapolis and Omaha and the Minneapolis and St Louis together with the Rock Island Connections were also made with Duluth by way of the Northern Pacific, the Chicago, St Paul, Minneapolis and Omaha and the St Paul, Minneapolis and Manitoba [1]

The extension of railroads is illustrated by the increase in the number of miles of road in the state The second boom period in Minnesota's railroad building lasted from 1877 to 1895 The mileage was increased from 2,198 5 in 1877 to 3,099 32 in 1880, 4,226 42 in 1885, 5,409 11 in 1890 and 5,990 78 in 1895 [2] The importance to the wheat farmer of this extensive building is obvious As early as 1881 the railroad commissioner stated that there was hardly a cultivated farm in the state from which the farmer could not drive to the railroad station and return in a day [3]

A noticeable change in the organization of roads came with the new activity of those years Many short lines were united into large systems Consolidation of roads was especially marked after the depression following the panic of 1873. By 1881 there were six major systems: the Milwaukee, the Northwestern, the Omaha, the Manitoba, the Northern Pacific and the Minneapolis and St Louis [4]

There was also a general improvement in the condition of the roads The development of safer and more efficient methods of organization and management was significant The cost of operating was reduced The leveling of grades,

[1] *Report, Minn Rail and W'house Coms*, 1885, in *Minn Ex Docs*, 1885-86, vol ii, pp 32-33

[2] *Report, Minnesota Railroad and Warehouse Commission*, 1905, p 143

[3] *Report, Minn Rail Com*, 1881, in *Minn Ex Docs*, 1881, vol i, p 15.

[4] *Ibid*, p 4, *Report, Minn Rail Com*, 1882, p 280

improvement of roads and building of stronger engines and larger cars resulted in greater economy in transportation[1] The volume of traffic was so largely increased as to improve the financial condition of the roads The amount of wheat carried by the Northern Pacific was 144,000 bushels in 1874 and 5,777,000 in 1884 At the same time the wheat traffic of the Manitoba grew from 2,292,000 to 20,697,000 bushels[2] The railroad commissioner reported that during the year ending June 30, 1884, the freight traffic of the state increased 8 per cent while the amount of operating expenses relative to gross earnings decreased 5 75 per cent[3]

There was a significant decrease in rates The average for all roads in the state fell from 2 523 cents a ton a mile in 1875 to 1 460 cents in 1885[4] The rates on the northwestern roads were then, as earlier, higher than on roads in the southern part of the state This difference became, however, continually less, as is seen from the following figures:

AVERAGE RATE A TON A MILE[5]

In cents

Year	Chicago, Milwaukee and St Paul (Southeast)	St Paul, Minneapolis and Manitoba (Northwest)	Northern Pacific (North)
1875	2.10	3.56	3.54
1880	1 76	2 99	2.59
1885	1 26	1.52	1.78

[1] *Report, Minn Rail Com.*, 1882, p 30 and 1884, pp 12-15 and 17

[2] Reports of individual companies in *Report, Minn Rail Com.*, 1874 and *Report, Minn Rail and W'house Coms*, 1885

[3] *Report, Minn Rail Com*, 1884, pp 17 and 74.

[4] *Ibid*, reports of companies, *Reports, Minn Rail and W'house Coms.*, 1885, in *Minn Ex Docs*, 1885-86, vol 11, p 61, *Report, Minn Rail and W'house Com*, 1890, p. 185 Those figures represent average rates as reported by the companies In this instance they are of value only as they indicate trends

[5] *Report, Minn Rail and W'house Com*, 1885 and 1890.

The fall in wheat rates was about proportional to the above, as is indicated by a few cases On the St. Paul, Minneapolis and Manitoba the charge a bushel of wheat in 1875, 1881 and 1884 from Elk River to St Paul was 7 8, 4 8 and 4 2 cents, from Willmar to St Paul, 13 2, 10 8 and 7 8 cents, from Breckenridge to St Paul 17 1, 14 4 and 12 6 cents, respectively[1] The fall in average rates was as regular as if consciously directed, although no force from the outside except that of public opinion was exerted against the roads.

The rates from Minnesota to the eastern seaboard cities fell even more than those within the state The average charge a bushel of wheat from Minneapolis to Chicago by rail and on to New York by lake and rail fell from 29 4 cents in 1878 to 18 cents in 1885 By way of Lake Superior the corresponding charges were 27 6 and 16 8, and by all rail, 30 3 to 19 2 cents[2] The lowest rates were those from the lake ports to the East The competition between those ports and the seaboard was very close[3] Between Chicago and the East competition was keen, as is indicated by the rate wars of 1874, 1876, 1881 and 1884[4] Had the freight charges from Chicago to New York been levied according to distance as provided for by the Granger legislation, the result might have been disastrous to the western farmer Had the rates for the long western haul been in proportion to the short-haul eastern rates, the West could not have competed in eastern markets unless some compensating change in costs or prices had appeared[5]

[1] *Report, Minn Rail and W'house Com*, 1888, p 113, as reported by the roads

[2] *Report, Minneapolis C C*, 1884, p 33 and 1885, p 153

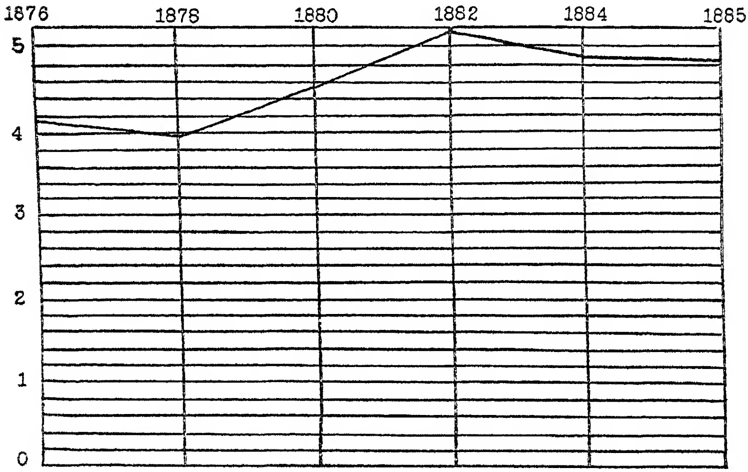
[3] During six months of the year the rates were controlled by water rates and the rest of the years modified by water rates *Report, Minneapolis B T*, 1876, p 45 and *Report, Minneapolis C C*, 1884, p 30

[4] Ripley, *Railroads Rates and Regulation*, pp 22-23

[5] An article by M C Beebe of the Penna. Board of Agric in

Though the fall in rates was considerable, it was not so great when expressed in terms of the price of wheat, for the price also fell, as is indicated by the following graph which shows the number of bushels of wheat carried from Minnesota to New York by a sum equivalent to the price of one bushel in the New York market

NUMBER OF BUSHELS OF WHEAT CARRIED TO NEW YORK[1]
BY THE PRICE OF ONE



The greatest change in wheat-transportation costs occurred in the decrease in steamer charges to Liverpool. Rates from New York, which had reached a maximum of

McCormick, *Agriculture of Pennsylvania* (Harrisburg, 1881), p 171, stated that in proportion to distance it cost the farmer of Lancaster three times as much as it did the Wisconsin farmer to ship wheat to New York.

[1] Calculated from the price of the grade most nearly corresponding to Minnesota No 1 spring in *Report, N Y Prod Exch*, 1880, p 430 and 1882, p 566, *Com and Fin Chronicle*, 1883-1885 Rates from *Report, Minneapolis B T*, 1876, p 45, *Report, Minneapolis C C*, 1884, p 33 and 1885, p 123, *Report, N Y Prod Exch*, 1890-91, p 72

21 12 cents in 1873, fell to 16 cents in 1876 and 7 76 in 1882 [1]

Irregularity was still the rule in freight charges Discrimination between places was not so evident as formerly but was still the cause of much dissatisfaction with the roads [2] Agreements between roads at competitive points kept rates up at those places and thus equalized the charges for all points A rate war which advertised the existence of such an agreement occurred in 1882 The freight traffic between Minneapolis, St Paul, Chicago and Milwaukee had been pooled by four major lines The cause of the war was a misunderstanding between these roads [3] A similar pool between the Northwestern and the Milwaukee had in 1877 been extended to include Winona and La Crosse, and it was no secret that the two lines did not compete to any great extent [4]

A cause of antagonism toward the roads in the first half of the eighties was the system of transit rates A milling-in-transit privilege which gave the shipper the advantage of through rates was granted as a concession to the growing milling industry in the state, particularly in Minneapolis, in order to retain the wheat for the long haul on the road on which the shipment originated This was practiced by the Northwestern, the Omaha, the Milwaukee and the Minneapolis and St Louis When transit rates were first established, Chicago was considered the best wheat market for

[1] *Internal Commerce of the U S*, 1884, p 422

[2] *Report, Minn Rail Com*, 1884, in *Minn Ex Docs*, 1883-84, vol ii, p 568, "Report of the Farmers' Board of Trade", 1883, in *Minn Ex Docs*, 1882, vol i, 310, *Preston Republican*, June 26, 1879, p 3

[3] C, R I and P, M and St L, C, M and St P, and Burlington *Report, Minn Rail Com*, 1882, pp 22, 27, 40-47 The *Duluth Tribune*, Nov 23, 1882, p 1, interpreted the rate war as a contest for the control of the stock of the Omaha

[4] *Internal Commerce of the U S*, 1879, p 176

the Northwest But when Minneapolis and Duluth became good markets, the transit system, requiring a through rate to Chicago or the alternative, an excessive local rate to Minneapolis, became burdensome[1] Moreover, the system prevented the shipper from choosing the road on which he should ship eastward from Minneapolis If he disposed of his wheat in Minneapolis, the shipper could sell his unused transportation to Chicago But so much of this was usually offered that the price was low and the shipper sustained a distinct loss[2]

For the wheat trade the most significant of all discriminations was that between shippers, which was apparently as widely practiced as ever Rebating was common—so common that the reports of the Minneapolis Board of Trade and the Chamber of Commerce admitted it to be a regular practice[3] The larger, more regular shippers could bargain with the railroads The roads, naturally, saw advantages in the regularity and dependability of large shippers. Rebating was, however, very undesirable, as it gave certain shippers advantages which would increase their power relatively to that of their competitors

The change which more than any other affected Minnesota's wheat trade in the late seventies and the eighties was the rise to a position of importance of the local primary markets, Minneapolis and Duluth. The influence of Chicago and Milwaukee remained predominant on the railroads in the southeastern part of the state But in the new

[1] *Report, Minn Rail and W'house Com*, 1885, in *Minn Ex Docs.*, 1885-86, vol ii, pp 32 and 34

[2] McPherson, *Railway Freight Rates*, pp 199-200, *Report, Minneapolis C C*, 1884

[3] *Report, Minneapolis B T*, 1876, p 45, *Report, Minneapolis C. C*, 1884, p. 33 The writer interviewed men, who were "on the inside" of the large shipper business at that time, who have admitted that the practice was prevalent

wheat regions of the newer Northwest, Minneapolis and Duluth were the strongest The phenomenal rise of Duluth as a wheat market began at that time The amount of wheat received increased from an annual average of 1,693,-503 bushels from 1876 to 1880 to an average of 9,159,162 from 1881 to 1885 [1] Practically all the wheat received was sold on the Board of Trade and was shipped by the lakes It was stored through the winter in the elevators of the Union Improvement and Elevator Company, the Lake Superior Elevator Company and the St Paul and Duluth Railroad [2] The grain was inspected, graded and weighed according to rules of the Duluth Board of Trade The importance of Minneapolis was largely due to the development of its flour milling, which is indicated by this table

FLOUR PRODUCTION IN MINNEAPOLIS [3]

In barrels

1860	30,000	1875	843,000
1865	98,000	1880	2,051,840
1870	193,000	1885	5,221,243

By 1880 Minneapolis was the largest milling center in the United States [4]

A variety of factors contributed to the making of Minneapolis milling A fundamental one was the development of a large spring-wheat area to the west and northwest of the city. Very important was the Falls of St Anthony, which provided power The work of keen, energetic and far-sighted men, like George Christian, Thomas Loring, the Pillsburys, Washburns and Crosbys, was a vital element.

[1] *Report of the Duluth Board of Trade*, 1885, p 14

[2] *Ibid*, pp 30, 35-36

[3] *Report, Minneapolis B. T and C C*, 1882, p 41, *Report, Minneapolis C C*, 1890, p 142

[4] *Internal Commerce of the U. S.*, 1884, app, p 116.

The accumulation of capital by means of trade and lumbering, and the concentration of railroads at that point were significant These factors would undoubtedly have made Minneapolis a strong milling center, but the use of new milling methods, in which Minnesota and Minneapolis were pioneers, gave a decided impetus to that development.[1]

The new process of milling was very significant, not only on account of its importance to Minneapolis but also because of the effect it had on the relative value of spring and winter wheat Almost the entire crop of Minnesota was at that time spring sown[2] Winter wheat was universally considered superior to spring for milling purposes, and the price of the former was always above the price of the latter

The difference in the value of spring and winter wheat was due to the difference in the kinds of wheat and in the milling methods used Spring wheat has a brittle bran which is easily broken The bran of winter wheat, on the contrary, is tough and resists grinding The skin of the former, owing to the ease with which it is pulverized, was separated with difficulty by the old milling methods As a result, spring-wheat flour was darker and gathered moisture more readily than that made of winter wheat; its breadmaking and keeping qualities were, therefore, lower[3] Consequently, its price was less than the price of winter-wheat flour[4]

[1] *Cf* Kuhlman, C B, *The Development of Flour Milling in the United States, with Special Reference to the Industry at Minneapolis,* ms Ph D. Thesis, 1924, Library, Minnesota University, *passim*

[2] In the timber sections and oak openings of the southeastern part of the state, winter wheat was raised successfully at the time, but not on the open prairies

[3] An article in the *Report of the Minnesota Bureau of Labor Statistics,* 1891-92, on new process milling and its effects is very useful For the history of milling see W C Edgar, *The Story of a Grain of Wheat* (New York, 1903), *passim*

[4] In the years 1871-73 Minnesota spring sold for 6 to 23 cents less per bushel than red and amber winter wheat, according to prices in the *Buffalo Daily Courier.*

In the sixties Minnesota millers were trying to overcome the difficulties in making spring-wheat flour By 1870 Archibald of Dundas and Mowbray of Stockton had attracted wide attention because of the fine quality of flour they were making—a flour which was selling higher than winter-wheat flour [1] Archibald's "Extra", quoted as $13 50 a barrel on the New York market, May 24, 1872, was the first real new-process flour to be put on the market anywhere [2] Every effort was made by the millers of Minneapolis to discover the method used by Archibald and Mowbray, but their mills were closed to strangers George C. Christian, an agent of an eastern flour firm by cultivating Archibald's friendship finally learned the secret, which was to grind slowly and loosely, keeping the stones smooth, and to purify and regrind The value of this method lay in the slow and loose grinding, which did not pulverize the bran but broke it into larger particles so that it could be separated from the rest [3]

George Christian thereupon went to Minneapolis and started milling in the bankrupt Washburn B mill [4] He secured the assistance of Edmund La Croix, who had received a scientific education in France and had had milling experience at Faribault, Minnesota At this place La Croix and his brother had built a purifier to separate the bran from the flour between grindings Such a purifier was built in Christian's mill and was later improved by the addition of moving brushes for the under side of the bolting cloth to

[1] *Northwestern Miller*, Feb 16, 1877, p 1, Sept 7, 1883, p 222, Oct 5, 1883, p 319 And Rogers, "Hist of Flour Manuf in Minn," *Minn Hist Soc Coll*, vol x, pt 1, pp 39-42

[2] *Northwestern Miller*, Sept 7, 1883, p 222

[3] *Ibid*, Feb 16, 1877, p 1

[4] *Ibid* ; *Report, Minneapolis B T*, 1876, p 39

prevent clogging, a difficulty which Archibald had tried to overcome [1]

In the seventies the new-process milling, as it was called, came into extensive use in Minneapolis Another step in milling development was taken in the introduction of rollers In 1875 Archibald bought one of two sets of porcelain rolls imported from Europe—the first to be brought to America.[2] By 1879 the roller system had come into use in Minneapolis, and two years later the merchant mills had all changed to rollers [3] The new-process milling made it possible to make flour of spring wheat equal in color to the best winter wheat and superior in strength because of its high gluten content [4]

The change in milling methods had a very definite and immediate effect on the relative value of the different spring-wheat flours and of winter and spring In 1876 patent spring (the new-process flour) was regularly quoted $2 a barrel above choice to fancy spring on the Chicago market [5] But the patent process had even a more noticeable effect on the relative price of winter- and spring-wheat flour. From 1860 to 1870 the best winter-wheat flour sold much higher at Buffalo than the corresponding grades of spring, the excess at times rising to $6 75 a barrel After 1875 "Minnesota Patent" sold for as much as $2 25 a barrel above winter [6] In Chicago the price of patent spring was from 25 to 50 cents above medium to choice white winter in 1876

[1] Rogers, *op cit*, p 45, *Northwestern Miller*, Aug 10, 1883, p 136 Archibald had used a silk bolting cloth, but two men were required to keep it from clogging (*ibid*, Feb 16, 1877, p 1) Also, Edgar, *The Story of a Grain of Wheat*, p 158

[2] *Northwestern Miller*, Sept 7, 1883, p 222

[3] Kuhlman, *op cit.*

[4] *Report, Minneapolis B T*, 1876, p 39

[5] *Report, Chicago B T*, 1876, p 79

[6] Prices from *Buffalo Daily Courier.*

Two years later, according to the *Report of the Chicago Board of Trade,* "Choice Minnesota Patent flour . . . commanded an unusually large premium over other fine qualities" [1] Subsequent reports for the eighties show that the lead was maintained by patent spring

The effect on Minneapolis millers of this price situation was striking Until the middle eighties they had a virtual monopoly of the new process and their profits were high Those monopoly profits began to disappear when other millers learned to make as good flour, but by that time the basis of Minneapolis milling fortunes had been laid and the position of Minneapolis as a milling center had been established [2]

The price of spring wheat did not rise so fast as that of spring-wheat flour On the Chicago market no 2 red winter maintained a strong lead above no 2 spring until 1880, in that year spring gained perceptibly, but winter retained the lead until the end of the eighties, when the price of the two was generally about equal [3] On the New York market no 2 Milwaukee and Chicago spring was quoted lower than no 2 red winter in 1880, but by 1889 the average of both the spring grades was slightly above that of red winter These quotations indicate that the price of ordinary spring wheat was slowly affected by the changes in milling [4]

Hard spring wheat reached earlier a favorable position

[1] *Report, Chicago B T*, 1876, p 79

[2] *Report, Minn Bureau of Labor Statistics*, 1891-92, p 186

[3] Those were the only grades for which comparable figures were obtainable Prices from the *Report, Chicago B T*, 1869, p 55, 1875, p 79, 1876, p 81, 1877, p 95, 1878, p 85, 1879, p 95, 1880, p 79, 1881, p 75; 1882, p 71, 1883, p 103, 1884, p 91, 1885, p 113, 1886, pp 148-171, 1888, p 137, 1889, p 95, 1890, p 7, 1894, p 8 Also, *Minn Bureau of Labor Statistics, op cit*

[4] *Report, N Y Prod Exch*, 1879-80, pp 417-422 and 1889-90, pp 47-59

relative to winter wheat, a fact of importance to the northwestern part of Minnesota, which raised most of the hard spring produced in the country A comparison of prices of Minnesota hard spring and of corresponding grades of winter in the Buffalo market shows that from the first appearance of the former in that market in 1871 until 1874 the winter wheat was considerably higher in price In 1875 the spring wheat showed definite gains, and from 1876 to 1890 spring prices were, with few exceptions, considerably above winter-wheat prices [1]

As knowledge of the new process spread, the value of spring wheat rose generally and placed the regions where it was produced in a favorable position compared with that which they had formerly occupied But the most immediate value to the Minnesota farmers of improvements in milling lay in the growth of Minneapolis as a strong bidder for wheat

The leadership which expressed itself so effectively in the development of Minneapolis milling also built up a market for its flour In the early sixties, said J J Hill, a shipment of flour from Minneapolis was marked "Muskingum Mills, Troy, Ohio—The Genuine", for Minnesota flour was not known outside of the state [2] By 1870 flour commission houses were sending agents to buy Minnesota flour, but they were interested chiefly in the country mills of the southeastern section [3] But in the middle seventies Minneapolis flour agents invaded eastern markets and W H Dunwoody, agent of the Millers' Association, went to England with a miller, sold flour to bakers in London, Liverpool and Glasgow, and established a demand for Minneapolis flour

[1] Prices from *Buffalo Daily Courier* to 1890

[2] Hill, "Hist of Agric in Minn," in *Minn Hist Soc Coll.*, vol viii, p 275.

[3] George C Christian represented a Boston firm.

in spite of the opposition of English millers In 1878 the first direct exports were made from Minneapolis, totaling 109,183 barrels of flour In 1879 Germany, Belgium and Holland became customers of this flour city By 1884 one fifth of the total flour exports of the United States were shipped from Minneapolis While a great deal was sold abroad, the better grade of flour was taken by an increasing domestic demand which was especially strong in the South and Southwest Thus an effective demand for the Minneapolis product was built up in a short time [1]

Out of the phenomenal development of Minneapolis grew an organization for buying wheat which became a very significant factor in its trade The Minneapolis Millers' Association, formally reorganized in 1876, was for a number of years the main agency supplying the mills with wheat [2] There was no grain exchange at Minneapolis The association took the place of one, with this difference, that it was completely controlled by the mills which were members of the organization [3] The association maintained offices in Minneapolis where wheat was brought by sample, rules were established for grading and prices were determined [4] The association had a general manager, a position held for several years by W H. Dunwoody

To secure a regular supply of wheat, the association sent

[1] *Report, Minneapolis B T*, 1880, p 58, *Report, Minneapolis C C and B T*, 1882, p 41, *Report, Minneapolis C C*, 1884, p 83

[2] *Cf supra*, p 91, an interview with C A Pillsbury reported in *St Paul Pioneer Press*, Nov. 27, 1886, p 6, *Northwestern Miller*, Dec 8, 1876, p 2

[3] *Report, Minneapolis B T*, 1877, charter and by-laws, art XIII, secs. i, ii, iii, vi, x and xii, *St Paul Pioneer Press*, May 4, 1875, p 3 The large number of mill members of the board probably prevented the establishment of an exchange

[4] *Report, Minneapolis B T*, 1879, p 36, Moore and Kenner of the Bank of Morris to I Donnelly, Aug 16, 1880, *Donnelly Papers*

agents out into country markets to buy and they contracted with elevators for wheat To quote C A Pillsbury

> The reason for the formation of the old millers' association was the fact that owing to the rapid development of the milling interests in Minneapolis and other sections of the state . the mills were built faster than there was wheat naturally tributary to Minneapolis to supply them, and the millers' association was organized for the purpose of bringing wheat to Minneapolis that was not naturally tributary to this point [1]

The advantage of one large organization over many small buyers, under such conditions, is obvious, for it eliminated competition between the mills and it decreased expenses of buying Country buying also regulated to some extent the amount bought, so that it conformed with the credit facilities of the mills and the opportunities for storing wheat in Minneapolis [2] The wheat bought was distributed to the mills according to their milling capacity.

The association continued buying wheat at Minneapolis and at country points until 1886 Since it had by that time been largely displaced by the Minneapolis Chamber of Commerce and since the wheat situation which had called it forth had changed, the association gave way to the Millers' Union, which was to buy wheat on the exchange, only. The Union was merely an experiment, and it expired by limitation in December, 1886, for it was not found particularly useful.[3]

[1] *St Paul Pioneer Press*, Nov 27, 1886, p 6 In the fall of 1876 and the winter of 1877 there was such a shortage of wheat in Minneapolis that it was forced to buy in Milwaukee Even then most of the mills had to be shut down according to the *Anti-Monopolist*, Dec 28, 1876, p 1 and the *Northwestern Miller*, Jan 26, 1877, p 2 and Feb 23, 1877, p 6. That year was, however, a poor crop year

[2] *Report, Minneapolis B T*, 1880, p. 39

[3] *St Paul Pioneer Press*, Nov 26, 1886, p 6 (statement by C M. Loring); *Minneapolis Tribune*, Aug 2, 1886, p. 5

A second phase in the development of Minneapolis as a wheat center came with the organization of an open market and the beginning of the sale of wheat for shipping In the seventies the demand for wheat had outrun the supply, but by 1881 this was changing [1] At the same time the country millers of southern Minnesota and of Iowa and Wisconsin were forced to buy wheat farther north because of the diminishing local supply and in order to maintain the grade of their flour by obtaining the hard northern wheat for mixing The few commission dealers in Minneapolis were in a bad situation, for storage was controlled by the millers and there was no organization through which they could sell consignments of country shippers or fill outside orders Buyers went out to country stations to secure grain, but there, too, they met the competition of the Millers' Association, which controlled most of the storage at country points A central exchange was necessary for producers, buyers and commission men, but it was not desirable for the millers [2]

In 1881 a few Minneapolis business men, including several commission firms, organized the chamber of commerce, with the strong opposition of the millers, who feared competition. A charter was secured immediately from the state An exchange room, open for trading one hour a day, was provided, and rules were adopted for grading, weighing and inspection, though most of the early sales were by sample [3] An open market was thus secured in Minneapolis [4] Because

[1] *Report, Minneapolis C C*, 1883, p 27

[2] *Report, Minneapolis B T and C C*, 1882, pp 4-5, *Report, Minneapolis C C*, 1883, pp 27-28, Federal Trade Commission, *Grain Trade,* vol ii, p 141, quoting Col G D Rogers, first secretary of the Minneapolis C C

[3] *Ibid* , *Minneapolis Tribune,* Aug 4, 1882, p 7, *Report, Minneapolis B T and C C*, 1882, p 3

[4] *Report, Minneapolis C C*, 1883, p 29 and 1884, p 51 According to the *Minneapolis Tribune,* Aug 4, 1882, p 7, the Millers' Association tried

of the opposition of the Millers' Association it was difficult at first to secure consignments to be sold on the exchange But gradually the millers withdrew from the association, began buying on the exchange and became members of the chamber of commerce [1] By 1886 the interests of Minneapolis were solidly behind the chamber of commerce —not the least the interests of the millers

The influence of the Minneapolis Chamber of Commerce at the time is suggested by its membership As early as 1884 there were, in addition to local millers, commission men and elevator owners, two outside commission men, one from Milwaukee and one from Philadelphia, three country millers, Ames, Archibald and one from Wisconsin, and seven small-town grain men, among whom were Van Dusen of Rochester and Brooks of Minneiska, who became very important figures in the wheat trade of Minneapolis [2]

With the organization of its grain exchange Minneapolis became a shipping market In the earlier years of the exchange, shipments, which were small, were mainly to country

to control inspection at Minneapolis The general manager of the association said, on the other hand, that the wheat inspector appointed by the chamber "certainly is not favorable to us," as quoted by the *Northwestern Miller*, Dec 15, 1882, p 468 A member of the chamber of commerce expressed the attitude of that organization by saying that it was organized in order to have "somewhere in the city a grain handling organization not run exclusively in bear interests The Millers' Association, whether justly or unjustly, has been regarded all through the northwest as controlling the price of wheat against the interest of the producer, and as far as Minneapolis is concerned has been regarded as a monopoly in the market an open market has all along met the covert hostility of the Millers' Association, but it has been hailed with delight by consumers and shippers in country markets, and has put the city itself on a better footing and in better order as a grain market" (*Minneapolis Tribune,* Aug 4, 1882, p 7)

[1] *Report, Minneapolis C C*, 1883, pp 31-32 By 1884 the millers held important offices in the c c, C A Pillsbury being president.

[2] *Ibid*, 1884, pp 7-23

millers nearby and to cleaning and mixing firms in Milwaukee and Chicago[1] The trade was gradually extended, but no direct export sales were made before 1886[2]

The importance of Minneapolis as a wheat market increased greatly with the growth of its mills and its shipping trade The wheat receipts increased from 5,251,095 bushels in 1876 to 32,900,560 in 1885 In the latter year its receipts were higher than Chicago's, more than twice those of Duluth and considerably above three times Milwaukee's[3] Somewhat earlier Minneapolis had become the leading spring-wheat market[4]

A "home" market had thus been secured for Minnesota's wheat This was of importance to the grain trade of the state, for it brought more bidders for the wheat, it developed new forces in transportation and its grading could more closely approximate the exact quality of Minnesota's wheat But in Duluth and Minneapolis, storage, inspection, weighing—all phases of the grain trade—were in the control of the grain men[5]

Such were the changes and developments in wheat production and in marketing agencies outside of the local markets in those years The extension of production and of railroads widened the scope of the wheat trade The continued fall in transportation rates, especially in the north-

[1] *Report, Minneapolis B T*, 1879, p 41, *Report, Minneapolis C C*, 1884, p 5, and 1900, p 82

Ibid, 1884, p 85, 1886, p 43, 1889, p 50 And *Minneapolis Tribune*, Jan 12, 1887, p. 6

[3] *Report, Minneapolis B T*, 1879, p 40, *Report, Minneapolis C. C*, 1891, 73, *Report, Chicago B. T*, 1901, p 20, *Report, Milwaukee C C*, 1892, p 32; *Report, Duluth B T*, 1885, p 14

[4] *Report, Minneapolis B T*, 1882, p 29

[5] *Cf supra*, pp 127, 133, 135, also, *Minneapolis Tribune*, Jan, 1883, p 9, *Report, Minneapolis B T*, 1880, p 39, *Report, Minneapolis C. C*, 1885, p 97

west section, neutralized, in part, the disadvantages arising from the longer road to market The rise of Minneapolis and Duluth to importance in the wheat trade changed the situation in regard to primary markets The development of milling in Minneapolis and of the shipping trade in both markets increased the local capital and entrepreneurship for carrying on the grain trade And the new milling process changed the relative value of Minnesota's wheat as compared with other kinds of wheat The effect of all these developments on the local trade will be seen in the study of the country markets

CHAPTER VI

The Growth of the "Line", 1876-1885

The most outstanding feature in the development of Minnesota's wheat market at country points was the growth of lines of elevators A "line" is a group of country elevators, sometimes having storage at primary points, which is under one central management The buyers at the individual elevators receive definite instructions from the central office, where all matters of policy, price, grading, weighing, charges for storage and handling, shipping and selling in the primary markets are determined The local buyers are merely agents of the line and as such are obliged to follow instructions This became the characteristic type of elevator in the country wheat trade in those years

From the very first the railroads in the state had considered it their business to provide storage, but toward the middle of the seventies a change occurred in this respect The Granger movement had severely criticized the participation of railroads in the grain trade, and the courts had upheld the attack The railroads had, moreover, suffered financially as a result of the panic of 1873 and were forced to retrench Meanwhile the capital and the entrepreneurship necessary for carrying on the wheat trade had developed locally The control, therefore, of this trade passed from the railroads to local middlemen, the stronger of whom became line operators

There were three types of lines in Minnesota at this time: the line engaged exclusively in public storage, the mill line and the merchant line

In the southeastern section of the state, country millers owned many elevators L C Porter, the Winona Mill Company, the Hubbard, the Empire, the Eagle and other mills operated a number of elevators each on the Winona and St. Peter[1] Ames and Archibald, millers of Northfield and Dundas, were the principal mill-elevator owners and wheat buyers on the Iowa and Minnesota division of the Milwaukee Other roads of this section had few mill elevators, though there were some on the Southern Minnesota, on the Hastings and Dakota and on the river division of the Milwaukee.

There were also by 1882 several important lines other than mill lines in the southeast section Two La Crosse groups, Hodges and Hyde and the Cargills, bought on the Southern Minnesota, where they owned 525,000 of a total of 920,500 bushels storage capacity on the road These two companies were sometimes located at the same stations but more often at alternate ones Hyde and Cargill had been buying together earlier,[2] but even after they had formed different companies it appeared to the farmers that they did not seriously compete Farmers along the Southern Minnesota felt that not only did these lines not compete but they also tended to prevent competition on the part of other buyers As was the general practice at the time, several buyers or agents jumped on the farmers' wagons to bid for the grain, but their attempts to keep up the appearance of competition were often so ill concealed as to make the farmers suspicious It was undeniable that the trade centered more or less everywhere about the large buyers, and the small buyers sold their pur-

[1] This and similar information to page 145 was obtained from the statements of elevators, their capacity, owners and operators on all the roads of the states as given in the *Report of the Railroad Commissioner*, 1882 and in subsequent reports.

[2] In 1875 they bought 300,000 of 700,000 bushels of wheat marketed at Rushford, according to the *Preston Republican*, Dec 9, 1875, p. 2

chases directly to the large elevators The strength of these patricular large buyers on the Southern Minnesota is indicated by a sale which they made in 1878 of 80,000 bushels of no 1 wheat to a Liverpool buyer, which was said to be "one of the heaviest wheat sales ever made in the Northwest",[1] and which was probably the first important sale for direct export from Minnesota

The largest line operator in the southern part of the state was George W Van Dusen of Rochester, who bought several elevators of the Winona and St Peter in 1873 and established the first merchant line in the state[2] Van Dusen owned over one sixth of the elevator capacity on this road in 1882 and considerably more by 1885 He was the only large line operator on the Winona and St Peter, and he seemed to control buying at several stations On the Omaha road in the southwestern part of the state Van Dusen had two thirds of the elevator capacity in 1882 and even more in 1885 Since the Omaha had by that time become a Chicago line and as such gave less favorable rates to Minneapolis than to Chicago, some of Van Dusen's wheat on that line was sold on the latter market But his owning one of the largest elevators in Minneapolis indicated that he also sold much grain there[3]

The situation on one road was exceptional On the river division of the Milwaukee, where the river and the road competed, with consequent competition in the grain trade,

[1] *Preston Republican,* June 22, 1878, p 3 English millers had for some time been buying Minnesota wheat, which was the best they could get for mixing with other wheat For that reason they were willing to pay a heavy premium for it The larger markets received liberal orders from England for this wheat, according to the *Anti-Monopolist,* Jan 11, 1877, p 1, quoting the *Annual Report of the Chicago Board of Trade*

[2] *Supra,* pp 86-87, *Report, Spec Joint Rail Inv Com.,* 1871, p 234

[3] *Minneapolis Tribune,* Jan 1, 1883, p 9

there were no important lines The entire absence of complaints at those stations furnishes one of the strongest arguments from conditions in Minnesota for free competition as a regulator in the grain trade [1]

Until well into the eighties the country buyers of the southern part of the state looked mainly toward Chicago and Milwaukee for selling their grain Very little of the wheat of the southeastern part was sold in Minneapolis The millers claimed that they could not use the inferior wheat of that section It is more probable that the rate situation on the roads to Milwaukee and Chicago, the east and west roads south of Minneapolis, was the determining factor [2] But with the development of shipping sales on the exchange at Minneapolis, the trading operations of the southern Minnesota wheat men went to that city [3]

In no part of the state did line elevators become so powerful as in the northwestern section The Northern Pacific, a Duluth road, had two strong lines, the elevators of Barnes and McGill of Fargo and of A J Sawyer of Jamestown and Duluth On the Little Falls branch of this road the latter owned practically all the elevators, a case which was paralleled at the time on only one other road, a branch line of the Milwaukee in the southeastern corner of the state A J

[1] *Report, Minn Rail Com*, 1883, in *Minn Ex Docs*, 1883, vol i, p 178, *Report, Minn Rail and W'house Com*, 1885, in *Minn Ex Docs*, 1885-86, vol ii, p 37

[2] Chicago and Milwaukee were already beginning to fear the competition of Minneapolis and Duluth Their roads not touching Minneapolis gave lower rates to those who shipped eastward *Cf Report, Minneapolis B T*, 1878, p 48 and 1879, p 36

[3] The southeastern grain men who were members of the Minneapolis Chamber of Commerce in 1884 were several river-town dealers and G W. Van Dusen of Rochester, who operated on the Omaha road This suggests that the fact that many dealers from distinctly Chicago-Milwaukee roads were not members of the M C C had something to do with the rate situation

Sawyer became one of the strongest figures in the Duluth and Minneapolis wheat trade Besides these two, there were no important lines on the Northern Pacific before 1885 The greater part of the wheat on the Northern Pacific went at first to Duluth, but Minneapolis millers made a strong effort to secure wheat from this road Some did come to Minneapolis on the cars of the Manitoba carrying freight to the Red River country, which would otherwise have come back empty [1] But in 1882 a group of millers bought Barnes' share in the Barnes and McGill and reorganized it as the Northern Pacific Elevator Company, a Minneapolis line [2]

The St Paul, Minneapolis and Manitoba was more than any other large railroad in the state controlled by lines The first on this road was the Delano, Davidson and Kyle on the Breckenridge division This was a public storage line which did not buy and sell wheat—the last of its kind in the state But in 1882 it was bought by Pillsbury and a number of millers, for the reason, it was said, that it did not grade to suit the millers [3] The earliest line on the Moorhead and Fergus Falls branch of the Manitoba was the Pillsbury and Hurlbut, a mill line which was developed in the late seventies This soon became the most powerful line in the state [4] Through those lines, which included 50 per cent of the storage capacity on the Manitoba in 1882, the millers, according to the *Minneapolis Tribune*, gained "practical control of the wheat grown in the Northwest, as their elevators extend up the main line of the Manitoba road, and Messrs Pillsbury and Hurlbut own a system of elevators which extend along the Fergus Falls division, and its branches ex-

[1] *Minneapolis Tribune*, Jan 13, 1882, p 7

[2] *Ibid*, July 7, 1882, p 7 This became a Washburn-Crosby line

[3] *Ibid*, Jan 12 and 13, 1882, p 7, *supra*, pp 89-90, Federal Trade Com, *Grain Trade*, vol 1, pp 77-78 This was a Pillsbury-Washburn line

[4] Federal Trade Com, *Grain Trade*, vol 1, p 78

tending through Minnesota to the Manitoba boundaries ".[1] This was not expected to hurt the farmer, however, said the *Tribune,* since there were opposition elevators all along the line Such statements, often made by Minneapolis interests, were not particularly reassuring to the farmers, for to them control meant control

There was one rather unusual large line on the same road The Northwestern Elevator Company was organized in the late seventies by a group of thirty independent elevators opposing the domination of the Delano, Davidson and Kyle They built a million-bushel elevator at St Paul, a location which indicated anything but friendship with Minneapolis interests [2] Leading members of the Northwestern testified against the Millers' Association in a wheat investigation conducted by the Farmers' Board of Trade in 1882 They complained of the millers' control of storage sites and of inspection in Minneapolis [3] In 1883, however, this company owned 600,000 and in 1885 1,000,000 bushels of storage which was listed as Minneapolis storage by the chamber of commerce, and by 1885 officers of the Northwestern were as strongly supporting the millers as they had formerly attacked them [4]

In addition to these lines there were smaller lines and a number of independents and some track buyers in the northwestern section [5] Millers of the southeast had a number of elevators there in order to get the prized hard wheat for

[1] *Minneapolis Tribune,* Jan 13, 1882, p 7

[2] *Pioneer Press,* Aug 18, 1880, pp 7-8 and Aug 21, 1880, p 4

[3] *Ibid*, Sept 9, 1880, p 7

[4] *Minneapolis Tribune,* June 1, 1883, p 9 and Jan 30, 1885, p 2, *Report, Minneapolis C C*, 1885, p 97.

[5] An "independent" was a single elevator operated, generally by its owner, independently of other elevators

mixing with the poorer wheat raised in their own locality[1] The small mill lines, the independents and the scoopers (track buyers) helped maintain competition The smaller buyers were sometimes financed by Minneapolis commission men after the earlier eighties, but some buyers had difficulties with commission men, who were not always responsible Those buyers, as well as the larger farmers, often sold to Minneapolis millers But the policies of certain railroads and of larger lines of elevators tended to eliminate the smaller shippers

Several roads, especially those of the northwestern part, made rules against track loading, the method employed by the scooper and the farmer who shipped his grain Shipping from flat warehouses was also in some instances prevented[2] The roads held that the irregularity of such shipments and the fact that the small shippers sometimes kept the cars longer for loading than did large elevators justified restriction It is undeniable that the larger buyers could be more efficient But there were other considerations which were, in the long run, of as great significance to the railroads Rules forbidding shipping by farmers or track buyers destroyed a regulator in the local market and created dissatisfaction with and suspicion of the roads A law had been enacted in 1874 forbidding this very practice, but individuals hesitated to bring action because of the expense involved and from fear of incurring the enmity of the roads[3]

The St Paul, Minneapolis and Manitoba, the Northern Pacific and, to a lesser extent, other roads also began to dictate concerning the size and the location of elevators, along their right of way, from which they would receive grain In

[1] *St Paul Daily Globe*, Oct 15, 1878, p 1, I Donnelly to Mrs Donnelly, Oct 6, 1881, *Donnelly Papers*

[2] *Report, Minn Rail Com*, 1882, pp 35, 54-60, *ibid*, 1883, in *Minn Ex Docs*, 1883, p 174, *ibid*, 1884, p 39

[3] *Minn Gen Laws*, 1874, chs 31 and 40

1882 the Manitoba issued a circular requiring that all elevators on that road should be brought up to a capacity of 30,000 bushels and stating that they would refuse to receive grain from smaller elevators The same rule was adopted by the Northern Pacific This excluded shipping from the track, from flat warehouses and from smaller elevators It diminished the number of buyers at a station because the smaller dealers hesitated to build a 30,000-bushel elevator when they had no guarantee of equal shipping rights [1]

Opposition to this requirement was strong Protest meetings were held by farmers and small dealers, petitions were circulated demanding redress, and specific complaints were made to the railroad commissioner Action was finally brought against the Northern Pacific, which refused cars for shipping from a flat warehouse at Little Falls and required that the grain be loaded through the elevator of A J. Sawyer The supreme court of the state decided that the discrimination in this case created a monopoly and did not provide suitable facilities within the meaning of the law [2]

The railroads also claimed the exclusive right, in spite of a specific law to the contrary, to determine whether requests for sites for new elevators should be granted [3] In response to a complaint made by the railroad commissioner, the general manager of the Chicago, Milwaukee and St Paul expressed the attitude commonly taken by the roads

I am of the opinion that we cannot be compelled to give such

[1] Correspondence between Railroad Commissioner Baker and A Manvel, general manager of the St Paul, Minneapolis and Manitoba, in *Report, Minn Rail Com*, in *Minn Ex Docs*, 1882, vol iii, pp 54-58 Also, circular no 17 of the St P, M and M on page 59 of the same report, and *Report, Minn Rail Com* in *Minn Ex Docs*, 1883, vol i, pp 174-178, *Report, Minn Rail and W'house Com*, 1884, pp 18-20, 39

[2] *34 Minn*, pp 90 *et seq*

[3] *Minn Gen Laws*, 1875, ch 103, sec ix

permission to use our land There are at present, in our judgment, sufficient accommodations for the storage of grain at that point, and we do not consider it our duty to furnish ground for additional storage facilities [1]

But perhaps the most insidious, because the least tangible, was the question of rebates To obtain any information concerning this matter is very difficult, for wherever there were understandings they were secret The existence of rebating was not only claimed by farmers and the railroad commissioner—it was admitted to be a regular practice by the Minneapolis Chamber of Commerce [2] The larger buyers were generally the ones favored by rebates

The ultimate explanation of the strength of the line is found not in favors bestowed by railroads but in the power of the lines themselves As one railway official admitted, "it took all his vigilance to keep this class of men from 'getting on top of him' " [3] It is a significant fact that the most powerful systems of elevators in the state and the ones receiving the greatest favors from the railroads were those owned by Minneapolis millers and by Duluth wheat dealers Those lines were backed by large capital and skilled entrepreneurship Their owners were closely associated with the wheat trade in two of the largest markets in the country, and they received the best information and knew how to judge market situations And in both Minneapolis and Duluth they had considerable control of storage, inspection

[1] *Report, Minn Rail and W'house Com*, 1885, in *Minn Ex Docs*, 1885-86, vol ii, pp 435-441 *Cf Minn Ex Docs*, 1882, vol iii, p 56

[2] *Cf Report, Minn Rail. Com*, 1883, in *Minn Ex Docs*, 1883, vol i, p 175, *ibid*, 1884, pp 17-38, message of Gov Hubbard in *Minneapolis Tribune*, Jan 8, 1885, p 5, *Report, Minneapolis C C.*, 1884, p 33, *Minneapolis Tribune*, Dec 12, 1882, p 4, "Report, Farmers' Board of Trade," *Minn Ex Docs*, 1882, vol i, p 310

[3] *Report, Minn Rail Com*, 1882, in *Minn Ex Docs*, 1882, vol iii, p 265

and weighing, a fact which gave them a distinct advantage over smaller lines and independent elevators [1]

Some of the strength of the lines was undoubtedly due to the economies of large-scale business and of integration of functions They could afford to have a skilled managerial staff and could secure more satisfactory rates and services Their local elevators had large capacities and could handle large amounts of grain, which made the cost per unit less than was the case with smaller elevators And combining local and terminal storage, weighing, grading and buying and selling in local and terminal markets cut expenses by eliminating duplications and other costs

The elements of strength resulting from such organizations were evident in the trade at country points The greater resources of the large line often put it in a position to drive off competitors, or, as happened frequently, to determine the conditions on which smaller competitors could buy In places where two equally strong competing lines bought wheat, pools were arranged [2] The inevitable result of the existence of such powerful groups was to weaken competition or to eliminate it entirely Considering the low bargaining power of the average farmers, competition in the market or the opportunity to ship their own wheat would alone, under the *laissez faire* policy of the state, guarantee them a price consistent with that in the larger market plus the cost of reaching that point On the railroads of the Northwest, particularly, free shipping disappeared, and in many local markets the smaller independent wheat buyers

[1] *Report, Minn Rail and W'house Com*, 1889, in *Minn Ex Docs.*, 1889-90, vol II, p 84.

[2] *St Paul Daily Globe*, Oct 14, 1878, p 2, quoting the *Faribault Democrat* as saying that small millers buying on the Manitoba were told to quit, or were driven off The railroad commissioner of those years, as seen in the reports, thought the large lines controlled the independents

left the wheat trade or became subject to the control of the line[1] At some stations there was only one elevator, and that was one of a line[2]

Above the strongest lines in the state was another organization which was perhaps the most powerful group that ever appeared in the local wheat trade in Minnesota—the Millers' Association This organization, more than any of the individual lines, was the dominating factor in the country wheat trade from 1876 to 1885 In 1878 it had bonded agents at country points, buying according to instructions from the central office, on the river division of the Milwaukee as far south as Winona, on the Iowa and Minnesota to Austin, on the Minneapolis and St Louis to Albert Lea, on the St. Paul and Sioux City and on all its branches, on the Hastings and Dakota from Farmington to Dakota Territory and on both divisions of the St Paul and Pacific (Manitoba)[3] In other words, the association covered practically all of Minnesota except small southeastern and northwestern sections which were served by the Southern Minnesota, the Winona and St Peter and the Northern Pacific, all east-and-west roads not touching Minneapolis The millers did not buy in the southeastern part, they said, because of the inferior quality of its wheat.[4] But neither did they at first buy on the Northern Pacific where the best spring wheat was grown, nor on any east-and-west lines not touching Minneapolis With the growth of Minneapolis milling and the demands of the mills, they entered Northern

[1] *Report, Minn Rail Com*, 1883, in *Minn Ex Docs*, 1883, vol i, p 178, *ibid*, 1884, in *Minn Ex Docs*, 1883-84, vol ii, p 548

[2] *Ibid*, 1883 and 1884, also, 1885, in *Minn Ex Docs*, 1885-86, vol ii, p 29

[3] *Cf supra*, pp 133-134, *Anti-Monopolist*, July 4, 1878, p 1 reporting an interview with C B Andrews, Minneapolis agent of the Millers' Association

[4] *Report, Minneapolis B T*, 1879, p 36

Pacific territory, as was seen in the acquisition of the Barnes and McGill system of elevators in 1882

There is no evidence to indicate, as was so often claimed, that there was any definite understanding between Minneapolis, Duluth, Chicago and Milwaukee concerning the territory in which each should trade [1] There was, of course, a recognition of the superior strength of certain railroads and groups of buyers in different sections of the state The competition at some points between the different markets further disproves the charges of collusion on the part of primary markets The acquisition of the Fargo and Southern by the Milwaukee brought Chicago and Milwaukee grain men like Hodges and Hyde into what was considered Minneapolis territory The attempt of Minneapolis millers to gain control of a large part of the wheat trade along the Northern Pacific marked an invasion of Duluth territory That southwestern part of the state, which was served by the Omaha, traded with Minneapolis, Milwaukee and Chicago, while the river towns, where railroads and river competed, sold in all four primary markets serving the Northwest A determining factor in dividing the trade between the various markets was the influence of the railroads, which favored the shippers giving them the longest haul Therefore, Chicago and Minneapolis roads favored shipments to their terminals, the Manitoba encouraged shipments to Minneapolis and the Northern Pacific had to get as much wheat as possible for its terminal, Duluth This situation began to change toward the middle eighties, for the Omaha, the Milwaukee and the Northern Pacific were by

[1] An illustration is found in an article in the *Minneapolis Tribune*, Oct 2, 1878, p 1, quoting Mr Hodges, an anti-monopolist. The *St Paul Daily Globe*, Oct 22, 1878, p 1, claimed that a wheat ring existed which included not only the large primary markets but "every grist and flouring mill in all the little towns throughout the length and breadth of the state are members thereof—and have given bonds accordingly"

then becoming important feeders of the Minneapolis trade This change was due to the growing strength of Minneapolis as a market and to the power of its elevators at country points

The Millers' Association was particularly effective in bringing wheat to Minneapolis It sent buyers out to the farms to contract for grain with the farmers, and it had buyers at many stations The farmers delivered the wheat at specified elevators, where it was weighed and graded On delivering the receipt to the association agent, they received their payment [1] This organization also contracted with certain elevators to buy for them [2] On some roads, particularly the Manitoba, its members, as noted previously, owned elevators which really functioned as a part of the association These elevators bought wheat, like all who bought for the association, according to the list price set by the office in Minneapolis [3]

No marketing organization in Minnesota has ever been so widely and so persistently considered a monopoly as the Millers' Association Though its power was not sufficient at some places to give it any measure of control, it is undeniable that it was arbitrary in its grading and price at others

The Millers' Association was most powerful on the Manitoba Though its strength as an organization gave it an advantage at all points, that advantage was somewhat neutralized on certain roads which favored shipments to Chicago and Milwaukee The Milwaukee, the Omaha and the Minneapolis and St Louis all discriminated against Minneapolis shipments, and the Northern Pacific favored Duluth until in the eighties [4] But the Manitoba was a

[1] *Minneapolis Tribune*, Aug 15, 1882, p 4 and Aug 12, 1886, p 5

[2] *Ibid*, Jan 12 and 13, 1882, p 7 and *supra*, p 143

[3] *St Paul Globe*, Sept 18, 1892, p 1

[4] They allowed milling-in-transit rates to Minneapolis, but that city wanted lower rates without transit privileges.

Minneapolis and St Paul road as far as its freight haul was concerned, and its interests were, therefore, associated with any agency which brought wheat to those points This largely explains the close relationship between the Minneapolis millers and the wheat trade on the Manitoba

It is beyond question that the Millers' Association eliminated competition between the milling firms constituting its membership That was, obviously, one reason for its existence. In the early years of new-process milling, when milling profits were high and the wheat supply tributary to Minneapolis was insufficient for the mills, the Millers' Association undoubtedly kept the price below what they would have paid had competition been maintained Their temporary monopoly of the new process placed Minneapolis millers in a position where they could pay more than other markets The millers maintained that they paid more than any other market in the country, considering location, and that they were the farmers' best friends. "At Minneapolis—the milling center of the state—farmers are getting as much for their wheat as is being paid in Milwaukee or Chicago", said the *Northwestern Miller* [1] The Minneapolis Board of Trade held that "the price paid by millers averages fully seven cents above a shipping margin" [2] In 1882 the *Minneapolis Journal* stated in an editorial that wheat for milling was selling for from 7 to 14 cents more than the same grade for shipment to Chicago [3] C A Pillsbury very emphatically maintained that the millers were raising the price of wheat above the shipping price [4] In 1886 he said that the Millers' Association controlled "the price of wheat in the Northwest because it paid more than

[1] *Northwestern Miller*, Dec 29, 1876, p 7

[2] *Report, Minneapolis B T*, 1876, p 43 and 1878, p 49.

[3] *Minneapolis Journal*, May 14, 1882, p 2

[4] *Northwestern Miller*, Dec 15, 1882, p 468

anyone else would or could have paid"[1] These are merely typical statements from the millers' side The prices paid by the association at Minneapolis compared favorably with Chicago Board of Trade prices[2] But after the establishment of the exchange in Minneapolis in 1881, its quotations were generally from 1 to 3 cents higher than association prices[3] It is probable that if the millers had met more competition earlier the price of wheat in Minneapolis would have been not only as high but even higher, considering transportation costs, than in other markets.

There are no price figures to be had to indicate what the Millers' Association paid at country points where buying was less competitive But complaints of prices were very common. A typical attitude among the farmers was expressed by a person, widely acquainted with conditions in country markets, who wrote to the railroad commissioner that "there is an indisputable attempt on the part of the Millers' Association through collusion with railroad and elevator companies to prevent competition in the buying of wheat and thus dictate prices at every point in the state"[4] Another wrote "Is there any doubt but that the highwaymen who control the elevators of the northwest are simply robbing the farmers of the grain?"[5] Such complaints were very numerous And the strength of the association and its position in regard to railroads and elevators indicate that it was able to control competition somewhat and thus prevent prices from rising as high as if all shipping

[1] *St Paul Pioneer Press*, Nov 27, 1886, p 6

[2] Comparing prices of no 2 spring as given in the reports of Minneapolis and Chicago Boards of Trade

[3] Prices of the two as given in the *Report, Minneapolis C C.*, 1882, p 30 and 1883, p 35

[4] *Report, Minn Rail Com.*, 1883, in *Minn Ex Docs*, 1883, vol 1, p 177.

[5] *Northwestern Farmer*, vol 11 (Oct 14, 1885), p 115

and storage had been under equal conditions and all buying had been competitive

The most persistent complaints against the millers concerned the system of grades and the methods of grading Some people still considered any system of grading a fraud and believed in selling by sample only The spread between grades was commonly considered too wide Grades 1, 2 and 3 were required to weigh 58, 56 and 54 pounds, respectively [1] Rigid adherence to this rule seemed unreasonable to the farmer because of the difference in the prices of the grades If wheat weighed even a fraction of a pound below a grade, it was not graded up to the higher grade but down to the next grade The effect on the value of the grain is seen in considering the difference in price of three grades of wheat in Minneapolis, August 28, 1882, when the price differences were fairly typical of the spread between grades [2] No 1 was $1, no 2 was 95 cents and no 3 was 85 cents If a lot of wheat weighed 57½ pounds, that is, 99 1 per cent of the weight of no 1, it was graded no 2 and its price was 95 per cent of no 1 If it weighed 56 pounds, the minimum weight for no 2, its weight would be 96 5 per cent of no 1 but its price would still be 95 per cent of no 1 Likewise, a lot grading 95 or 93 1 per cent of no 1, in weight would in both cases receive 85 per cent of the price of no 1 This indicates, first, that the best quality within a grade was worth no more than the poorest within that grade, and, secondly, that the price spread between grades was greater than their actual weight spread But since there was more waste to a given weight in a lower than in a higher grade, a greater

[1] *St Paul Daily Globe*, Oct 14, 1878, p 2 and Oct 15, 1878, p 1, *Minneapolis Tribune*, Feb 3, 1882, p 4

[2] *Reports, Minneapolis B T and C C* Millers' Association prices 1876-1884 The spread in prices varied approximately with the amount of the prices Also, *Report, Minn Com of Statistics*, 1882, in *Minn Ex Docs*, 1882, vol iii, p 512

price than weight spread from grade to grade was fairly justifiable The failure to recognize the different qualities within a grade seemed less defensible and created a great deal of dissatisfaction with what was considered a pernicious system of grading

The arbitrary method of grading seemed even less defensible than the system of grades Grain was usually graded without consulting the owner, who took the grade offered or sought another buyer, a difficult matter in some places Consequently, a dishonest buyer could grade somewhat arbitrarily This opportunity to manipulate grades was one of the greatest evils in the grain trade Although wheat buyers seemed quite commonly to have made use of the opportunity to grade grain down, the strength of the Millers' Association made it possible for their agents to do this most extensively A less tangible but none-the-less real evil was the suspicion of wheat middlemen which grew up among the farmers

The "brass kettle" political campaign of 1878 advertised the irregularities in the wheat trade In this campaign, in which Donnelly, the Democrats, the St Paul newspapers and the St Paul Chamber of Commerce were arrayed against Washburn, the miller candidate for Congress, the Republicans, the Minneapolis newspapers and the Millers' Association, the fight centered upon the little "brass kettle" used for weighing grain to determine its grade [1] The Millers' Association was accused of using brass testers which weighed lower than legal weights The Washburn supporters maintained that Donnelly and his adherents were merely trying to make political capital of a condition which was only an invention for furthering their unscrupulous political ambitions Washburn won, although his election was—after the manner of the time in Minnesota—not so

[1] The *St Paul Daily Globe* and the *Minneapolis Tribune* for October, 1878, give the two sides of the campaign

regular as it might have been. Donnelly, who had championed the farmers, was again forced into retirement.[1]

It is difficult at any time to judge of evidence which is biased from being so intricately interwoven with diverse economic interests, and when the evidence is further distorted by a sensational political campaign the situation is even worse.[2] In this case, however, after discounting evidence so clearly based on the desire of one group to discredit the other politically, much remains which shows that there was great irregularity and intentional fraud.[3] The weighing and the docking of the Millers' Association were also criticized. The difficulty with weighing was an old one in Minnesota. But docking the wheat, because of its being mixed with other grain, weeds or dust, was noted more than earlier. Since this was even more than grading a matter of estimate, the opportunities for irregularities and suspicion were considerable. Under such a system there would be variations even with the greatest desire for accuracy. That dockage was more or less irregular is seen from a statement of the superintendent of the Davidson line on the Manitoba, a line of elevators buying for the millers. He said that grain was docked severely in order to give the farmers a higher grade for their wheat than it actually graded. This appears to have been a very common practice—its purpose is obvious.[4]

[1] *St. Paul Daily Globe* and *Minneapolis Tribune*, October, 1878, *Country Gentleman*, Dec. 5, 1878, p. 773, H. P. Hall (editor of the *St. Paul Dispatch*), *Observations* (St. Paul, 1904), p. 228.

[2] Some dissatisfaction was also caused in this instance by the fact that a small and inferior wheat crop was produced in 1878 in parts of the state. *Cf. Minneapolis Tribune*, Oct. 14, 1878, p. 4 and Oct. 15, 1878, p. 2.

[3] For instance, sworn testimony quoted by the *St. Paul Globe*, Oct. 15, 1878, p. 1, and a letter from James Middleton to the editor of the *Stillwater Republican* quoted by the *St. Paul Globe*, Oct. 14, 1878, p. 3; and Hall, *op. cit.*

[4] Grain men of those years have given the writer considerable information on conditions and practices in the markets at this time.

The same complaints continued to be made against the Millers' Association until it expired in 1886. Even today (1925) many who sold it wheat in the earlier years insist that the association cheated the farmers heavily and that it was a monopoly controlling the wheat markets of a large part of the state. Others maintain, on the other hand, that its wrongs were the exception and that its reliability, regularity and good prices were of great value to the farmer.

The truth seems to lie between these two positions. The former exaggerates the monopolistic features of the association. Yet it must be recognized that its vast business gave the association great commercial power, which was further increased by special rates, exclusive elevator privileges and favoritism in the assignment of cars—favors which inevitably destroyed a free market. Finally, the apparent object of the association was to secure sufficient wheat for the mills without paying the prices which competitive buying would maintain. Its purpose was obviously to control the market. But, again, those who maintain that the association was a distinct benefit to the farmers have the argument which compels recognition of the value of the regularity and reliability of a strong, responsible group in business. Most of the advantages attributed to the association had, however, their source in Minneapolis milling. It was that which raised the value of northern spring wheat—the association was merely a means by which those who controlled milling attempted to retain for themselves the increase in value resulting from new milling methods. It is evident that the rise in milling value of spring wheat would have increased the price in the local markets, as well as in Minneapolis, to a greater extent if there had been no Millers' Association.

Thus large-scale business as represented by the Millers' Association and by line elevators became the common type of marketing agencies at country points. This was largely

the result of the needs of the market at the time—the need of capital to finance the trade and of greater efficiency in marketing, and it was the product of competition of railroads and of market groups for the wheat of Minnesota Large-scale business revolutionized conditions in the local markets It undoubtedly brought improvements But to the producer it was dangerous, for it threatened to destroy competition, which was undesirable in the absence of control of marketing agencies by the producers or by the state Of this situation a railroad commissioner, who was closely acquainted with conditions, said

So in the process of time it had come to be a fact here that the handling and marketing of grain on the different lines of road had generally come to be controlled by a few corporations, firms or men, who arbitrarily dictated terms, fixed rates and customs and were able in many instances to drive out of existence the independent buyer, and so establish with or without the aid of the railway companies, a monopoly which touched nearly every producer in the state [1]

To give any estimate of the effect of those new developments in the wheat market on the price situation is impossible. It can be noted, however, that the variations in prices throughout the state were considerable, as may be illustrated by a few cases On a certain day in the fall of 1874 the price of no 1 wheat was 85 cents in Minneapolis, 75 at Shakopee, 71 at St James, 70 at Willmar, 69 at Melrose and 66 at Breckenridge, the prices varying approximately according to the distance from Minneapolis [2] In 1885 wheat prices at Wheaton, near the Dakota boundary about 200 miles directly west of Minneapolis, were from 10 to 20 cents below Minneapolis quotations [3] In Crookston, farther

[1] *Report, Minn Rail and W'house Com*, 1885, in *Minn Ex. Docs*, 1885-6, vol ii, pp 27-28

[2] *Minneapolis Tribune*, Oct 29, 1874, p 3

[3] *Wheaton Gazette*, 1885, and *Report, Minneapolis C C*, 1885.

north, prices were about 18 cents below Minneapolis figures in 1885[1] Prices in the Mississippi towns approximated most closely those in central market, considering transportation costs One who was familiar with conditions throughout the state wrote of the price situation in the river towns

> The Mississippi river towns from Hastings to Brownsville are open and free markets, everyone buying who chooses and everyone shipping that desires, and not a complaint has come from a single one of those places The record shows that they have paid the highest average price for grain, and with no complaints as to grades This is proof of the benefits of commercial freedom While in the western and northern part of the state and Dakota, a syndicate of men have practically been present at every station controlling prices and grades, all other competitors have long since disappeared It is here that the loudest complaints are heard[2]

There were very few effective attempts, from the waning of the anti-monopoly movement in 1875 until 1885, to deal with evils in the market A great number of bills were introduced in the legislature to improve conditions Only three were passed, and of those two rather ineffectively applied a remedy in the matter of monopoly One prescribed a sealed half-bushel measure as the legal standard for determining grade by weight[3] This was to do away with the "brass kettle" formerly used The other provided for a Farmers' Board of Trade, which should establish state grades and use its influence to improve conditions in the wheat trade[4] This was soon found worthless, for it had no power

[1] *Report, Minneapolis C C*, 1885, *Crookston Tribune*, 1885

[2] *Report, Rail and W'house Com*, 1885, in *Minn Ex Docs*, 1885-86, vol 1, p 370

[3] *Minn Gen Laws*, 1879, ch 95

[4] *Ibid*, ch 99

of enforcement[1] The third law defined more specifically the matter of ownership of grain in store The common law held that when grain was deposited in a warehouse for storage, ownership passed to the depositee, but this law stated that "such delivery shall in all things be held as a bailment, and not as a sale"[2] This was further explained by the court to mean that not the identical grain but the same amount of like quality could be claimed[3] This whole matter of storage was so indefinite There was much fraud in grade, in the matter of warehouse receipts and in terms of storage[4] One instance, which was not unusual, is found in the case of the Minnesota Elevator Company, which borrowed $64,000 from the National Exchange Bank of Hartford, giving as security receipts for grain stored in the elevators of the company but belonging to others[5] Insecurity and irregularity in the matter of storage were harmful to the trade Under such conditions the greater reliability of responsible lines made it easier for the lines to secure loans and, also, helped to stabilize the trade as a whole

No laws were passed that made any very significant changes or effectively attacked the problem of a free market at country points A number of reasons may be suggested for this situation One which was very evident was the opposition to reform on the part of marketing agencies,

[1] "Report, Farmers' B T", *Minn Ex Docs*, 1882, vol 1, p 308, *Minneapolis Tribune*, March 12, 1882, p 9 and Dec 2, 1882, p 5

[2] *Minn Gen Laws*, 1878, ch 124, sec XIII Other bills introduced but not passed are found in the *Journals of the Minn House and Senate* The original bills are preserved in the *House and Senate Files*, in the library of the Minnesota Historical Society

[3] *42 Minn*, p 35, *34 Minn*, p 149

[4] *34 Minn*, pp. 149-159 A warehouse receipt is given on page 90 of this report Also, *42 Minn*, pp 35 *et seq*

[5] *34 Minn*, pp 149 *et seq*

especially the millers and the railroads [1] It may have been due in part to the inertia which follows a strenuous political movement like that from 1870 to 1875 and to a loss of interest in reform because of the evident failures or supposed accomplishments of this earlier movement It can also be attributed somewhat to existing conditions The south-eastern section was confidently expecting emancipation from wheat-marketing problems by a decrease in wheat production and an increase in diversification; the northwest section, where the problem of the market was most serious, was too new to be able to organize and too hopeful for the development of the section to give much thought to those problems, and it was also afraid of discouraging railroads and other agencies needed to market its crops This difference in interest from section to section seems to explain much of Minnesota's failure to take action in regard to many of its problems But perhaps the strongest reason for the comparative inactivity at this time was the price situation The annual average price of the highest grade of wheat in Minneapolis shows that in only one year in the period from 1876 to 1883, inclusive, did the price fall below $1 a bushel—in 1878 the price was 92 cents But in 1883 a considerable decline began to be noticed, and the next year the price was down to 81 cents [2] The comparatively high prices until 1883 may have discouraged action even though conditions in the market were supposed to be unsatisfactory

There was, however, an undercurrent of dissatisfaction which increased until it demanded and received recognition in 1885 Sensational corners in Chicago advertised speculation and its effects. There was considerable suspicion of

[1] *Report, Minn. Rail Com*, 1884, in *Minn Ex Docs.*, 1883-84, vol. ii, pp 558-62

[2] Prices calculated from figures given in the *Reports of the Minneapolis Board of Trade and Chamber of Commerce*, 1876 to 1885.

crop and market reports, for it was feared that these were manipulated to benefit the speculators[1] But generally the farmers were more interested in problems more immediately touching them In most places the elevators were thought to have much power in the determination of prices and grades The farmers often learned from experience that the buyers at one station or even at neighboring stations would not bid against each other There arose a feeling, particularly throughout the northwestern section, that wheat rings controlled the state "Oh! for a state law to punish wheat thieves", said a newspaper which was a friend of "wheat-ring crushed farmers"[2]

The source of the trouble in the local markets was generally thought to be the railroads, with their policy of discrimination This was especially true of the Manitoba—the most powerful wheat road in the state This attitude toward the railroads was strikingly expressed by a Swedish newspaper

> When our people arrived in this free country, took land on the prairie, dwelt in sod huts and endured hunger and sickness in the thought that they might become their own master, it was only to become slaves under the president of one or another railroad company . . we escaped thus from one slavery only soon to be under another, which is so much more unbearable now when the spirit of freedom has been awakened in us.[3]

Toward the middle eighties this dissatisfaction was finding modes of more effective expression and was gaining the attention of prominent leaders in the state Governor Hub-

[1] *St Paul Pioneer Press*, July 28, Aug 10 and 11, 1880, p. 4 The state commissioners of statistics regularly explained in those years that it was difficult to get reliable data on agriculture because the farmers were afraid reports might depress prices

[2] *Daily Northern Tier* (Crookston), June 20, 1883, p. 2.

[3] *Svenska Folkets Tidning*, June 20, 1883, p. 2

bard became an advocate of a state system of inspection and warehouse supervision Although the legislature failed to heed his suggestions for marketing legislation, the governor, nevertheless, continued to emphasize the need of action [1] The railroad commissioner, also, emphasized the existence of serious irregularities and the disappearance of competition, with the suggestion that a state system of supervision, modeled on the Illinois plan, be adopted [2]

A farmers' movement, which was to become a very important element among those working for reform, began at this time In December, 1881, representatives of eighty local farmers' organizations met at Rochester and organized the Minnesota State Farmers' Alliance For several years after 1883 this movement grew rapidly, moving northwestward into the Red River region, where it was to become the leading influence working for reform [3] From the very first, the Alliance sought relief from unfair systems of grading, elevator frauds, excessive transportation charges and discrimination—it was essentially concerned with marketing problems [4] But as an organization it did not have much power in its earlier years It rather helped to influence opinion and to build up leadership in such a way as to make effective the reform movement which began to attack evils in the market in 1885

By 1885 the demands for reform had gathered considerable force and a definite beginning was made in the way of state interference in the wheat trade and in the development of cooperative farmers' elevators These developments

[1] Message of the governor, *Minn Ex Docs*, 1882, vol 1, p 32 and 1883, vol 1, pp 14 *et seq* , *Minneapolis Tribune*, Jan 5, 1885, p 5

[2] *Report, Minn Rail Com*, 1883, vol 1, pp 92-95 and 173-174

[3] Report of the state secretary, in which he reviews the history of the Minnesota Alliance, in the *Great West*, Feb. 14, 1890, p 4

[4] *Ibid*

which began in 1885 have often obscured the importance of the earlier period. But it was before that year, more especially in the ten preceding years, that the essential elements of the system and its fundamental problems developed The extension of wheat production westward, the growth in the strength of railroads and the cheapening of services, the development of Minneapolis and Duluth, the changes in milling methods and the growth of a comprehensive elevator system were all important factors in determining the nature of Minnesota's wheat market This new system, though more efficient, tended to be monopolistic. For that reason opposition appeared which was to attempt to restore the balance between the farmer and the middleman in the wheat market.

CHAPTER VII

REFORMING THE MARKET, 1885-1895

THE years 1885 to 1895 mark the period of reform in the development of Minnesota's wheat market. Up to that time the nature of the market had been almost wholly determined by general economic influences and by middlemen, and had in no way been seriously affected by interference on the part of the producers or of others not directly concerned with the wheat trade The Granger movement tried, it is true, to control certain marketing agencies, but it brought no fundamental changes in the system From the waning of that movement until 1885 the middlemen enjoyed almost complete freedom from interference A number of attempts were made to remedy irregularities, but those efforts were not sufficiently strong to overcome the opposition of railroads and elevators As suggested in the preceding chapter, a change was foreshadowed in 1883 and 1884 when a widespread demand for reform arose Three factors, in the main, contributed to this development Most constant of these was a rather inactive but nevertheless real antagonism on the part of the farmer toward the strong marketing agencies, whose power was growing; more immediately irritating were the abuses in the market, which exacted a heavy toll from the wheat, and most effective in arousing the opposition movement was the fall in prices, which began to be seriously felt in 1883 A reform movement encouraged by the Farmers' Alliance arose In 1884 it secured control of the state legislature and from then until the middle nineties practically dominated

state politics and brought significant changes in the wheat-marketing system of the state

Fundamentally, the problem was to meet the fall in wheat prices The general rise in prices which began in the last half of the seventies reached its high point in 1882 and was followed by a steady decline through 1887, prices rallied slightly in 1888, continued to rise in 1889, fell in 1890, increased in 1891 and then decreased considerably until September, 1896[1] A few illustrations indicate what they were throughout the state In 1884 a high quality of wheat sold for 48 cents in a more distant part of the Red River district[2] In the fall of 1885 the very highest quality of spring wheat, no 1 hard, was 67 cents in Crookston, in the northern Red River district, where it brought 87 cents in October, 1890, 79 in October, 1891, 62 in October, 1892, and 49 in the same month of 1893[3] In September, 1895, the same grade was 43 cents farther south[4] Wheat in the southern part of the state was even less, for its quality was not so good.[5]

The price of wheat was an essential element in determining the net income of the majority of farmers of Minnesota. They felt that it was necessary to take action to increase their income In this they were moved by a variety of

[1] Based on prices of wheat most nearly corresponding to no 1 Northern in *Report, Minneapolis C C*, 1895, pp 81-85 and 1900, p 74

[2] Budd Reeve to Major Hale, May 16, 1886, *Hale Papers*

[3] Crookston prices from *Crookston Tribune*, 1885, *Crookston Times* (weekly), 1890-1891, and *Crookston Times* (daily), 1892-1893 For these years prices were quoted very irregularly in the Northwest For that reason annual country averages were not given in the above comparison Note that the October prices do not correspond with annual averages of Minneapolis prices There is no inconsistency in this, for the October prices at Minneapolis and in the country were closely related but did not necessarily agree with the average for the year

[4] *Footprints* (Wheaton), Sept, 1895

[5] *Preston Republican*, market reports

motives One is illustrated by a farmer who complained of low wheat prices, with this comment

> Our land is very rich and for six years we have had good crops in the Red River Valley, but somehow we don't get along though we economize every way we can and work hard The plain truth is nearly every one of us that took up land here since 1881 has a mortgage on it for all it will carry, though the land was given us by Uncle Sam [1]

There was also much emphasis on the growing wants of the farmer, especially in the nineties In answer to the argument that, as a group, they were better off than formerly, one farmer denied that this was a debatable question, for "with the present facilities for producing he should be so much better off than ever before that no one would dare assert the contrary" [2] Another, after figuring the direct cost of producing his crop and finding a balance of $117 75, wrote, somewhat ironically, that this was the "balance to live upon, [for] clothing, charities, comforts, interest on debts, accidents, travel, books, newspapers, groceries, childrens' school wants,—diamonds and broadcloth for seven".[3] This emphasis on the broader wants of the farmers became common in the early nineties The so-called hardships of this time were not generally so severe as in the Granger period and were not so frequently mentioned, but the standard of living and the ambitions of the farmers had risen considerably since then, and these gave an additional motive for discontent.

How could the farmers' income be increased? As many ways were proposed as there were explanations of the cause of the difficulty Inefficient production, too much competi-

[1] *Farm, Stock and Home*, vol iii (Sept, 1887), p 307

[2] *Ibid*, vol vii (May, 1892), p 221.

[3] *Great West*, March 25, 1892, p 1

tion in the world wheat market and high marketing costs were the common explanations Constant wheat cropping, poor cultivation, lack of careful management, intemperance, laziness and other faults of the farmer and his methods were continually criticized About 1886 the competition in the English market of the "fellahs of Egypt", the "ryots of India" and the "peasants of Russia" seemed to threaten reducing the Minnesota farmer to a condition of "Asiatic wretchedness", and in the early nineties competition of the Argentine wheat fields came to be considered serious [1] In marketing, high transportation costs and the exactions of the middlemen in general, regular or irregular, were given as causes of low prices in Minnesota as compared with Liverpool quotations

The first two of these explanations were combined and were, in the main, made the basis of widespread activity to cut down the wheat area and adopt a more balanced system of agriculture, with special emphasis on dairying and hog raising Competition of Montana cattle made beef production unprofitable, but conditions were very favorable to the dairy industry. The growth of cities and towns increased the demand for milk The butter market was growing at home, and refrigeration on the railroads opened a rich distant market The invention of the Babcock tester (for determining the percentage of butter fat in milk) and the introduction from Denmark of the centrifugal cream separator were most significant elements in the rise of the factory system of butter making, as seen in the creamery movement of the late eighties and the early nineties in Minnesota The cooperative creamery idea, started by a few Scandinavians in Freeborn County, won the support of many farmers and further stimulated interest in dairying. The work of

[1] This was emphasized by the *Northwestern Farmer* and the *Farm, Stock and Home*. It was a popular topic with public speakers

Professor Haecker of the "farm school", who persistently spread the gospel of the dairy cow, and the untiring efforts of John Gregg of the Farmers' Institute were effective in developing interest in better farming and more diversified agriculture [1]

But this movement was largely localized in the south-eastern part of the state, in the northwestern section wheat raising was increasing [2] That was still a pioneer country, and those who settled there lacked capital with which to begin stock raising and dairying Under ordinarily favorable conditions it takes years to develop a dairy herd and longer to make a sufficiently strong dairy community to make possible large-scale, economical butter production Furthermore, the feed problem was a difficult one, for corn was not then successfully grown in the northwestern part It is also true that stock raising, especially dairying, requires a regularity and a discipline in labor which most farmers, and not the least the younger ones who went west, were reluctant to submit to There was, on the other hand, a decided lure in the speculative character of wheat raising, for the coincidence of a good crop and a high price was worth a risk The situation in the great wheat region west and northwest of Minneapolis is well described in a report of the railroad and warehouse commission "All over the state thousands of farmers are engaged almost exclusively in this industry [wheat farming] Many of them could not get away from it if they would, and perhaps it would not be advisable if they could" [3] It was not that they did not see the evils of

[1] The reports of the Minnesota Agricultural Society and the State Horticultural Society, of the Farmers Institute and of the dairy commissioner and the commissioner of statistics, as well as the *Farm, Stock and Home*, the *Northwestern Farmer* and *Hoard's Dairyman* contain a wealth of material which can only be mentioned here.

[2] *Annual Reports of Bureau of Statistics*, production by counties

[3] *Report, Minn Rail and W'house Com*, 1889, p 84

one-crop farming Many might have agreed with a Red River wheat farmer and trader concerning the scriptural reference to living by bread alone that "it was a prophecy in reference to the *single crop* system we are engaged in"[1]

One way of meeting lower prices was to increase production per unit of cost This seems to have been done to some extent Many farmers tried to raise on their own farms more of the food and feed which they needed Better cultivating—deeper plowing, for instance—gained some attention But the wheat farmers were very likely to blame the weather, weeds and insects rather than bad farming for a poor crop The element of chance in agriculture tends to discourage careful cultivating There is an old couplet about five grains of corn in a hill, which might well have been written about wheat

> One for the blackbird, one for the crow,
> One for the cutworm, and two left to grow.

Add to that the chance of having too much or too little rain and too warm or too cold weather in the growing or maturing period of the wheat plant, and too much rain at harvest and threshing time, and an idea is gained of the uncertainty of getting a good wheat crop Furthermore, the matter of chance in depending on the price of a single crop in an extensive market added to the difficulty A product selling in a local market only is less speculative, if one farmer's potato crop failed, it was quite probable that there was a general failure in the community, and the price of potatoes would most likely rise so that the inferior crop would bring a fair return But the failure of wheat on the Red River brought no such certain compensation, for it was quite probable that the wheat crop along the Plate, the Danube and the Dnieper would be so large as to lower the price of wheat the world over And the very reverse might

[1] Budd Reeve to Major Hale, May 16, 1886, *Hale Papers.*

happen, which only further emphasizes the speculative nature of the industry Whichever way it worked, there was an element of chance which tended to develop in the farmer a kind of fatalism which was inimical to progress

But it was not so in regard to the market While the elements determined the nature of the wheat crop, the middleman system was the work of man There were two ways in which the market could be changed to suit the farmer by producers' marketing organizations and by state interference "Man plows and sows", it was said, "but the dominant political party watereth and giveth the increase"[1] The idea that political power determined the distribution of the value of a product was a captivating one and was especially attractive to those who saw no chance to escape from wheat farming or to increase greatly the saving that might be made by more efficient production The reform movement in the wheat market was an attempt to apply this idea so as to lower middleman costs, irregular or otherwise, with the expectation that this would increase the income of the farmer

There were two high points in this reform movement, one occurring in the middle eighties and the other in the early nineties The actual accomplishments of the two parts of the movement did not differ greatly: there was rather an interrupted progression in attempts to meet the difficulties in the most expedient way by providing for means of regulating the market But in the aims, plans and general spirit of the more aggressive elements there was a distinct difference The one favored reform, the other a more or less fundamntal change in the marketing system In both, the leadership was taken by a farmers' organization, the Alliance, and its later political manifestation, the Populist Party

As noted earlier, the demands for market reforms became

[1] *Farm, Stock and Home*, vol viii (Nov, 1891), p 1.

very insistent in 1884 A convention of protest held in St Paul in March of that year made six recommendations one for the enacting of a law prohibiting the sale of oleomargarine, one opposing the protective tariff, and four on grading, warehousing and transportation of wheat [1] State interference in the terminal markets of the state (the primary markets, Duluth, St Paul and Minneapolis), the lowering of freight rates and the breaking of the collusion of railroads and elevators, which destroyed a free market at country points, were supported as effective means by which to improve conditions In the fall election Governor Hubbard, who had urged the legislature of 1883 to curb market abuses, was reelected; and the house and senate came practically into the control of the farmers [2]

The legislature which convened in January, 1885, worked assiduously on the marketing question [3] A house committee of fifteen began immediately to conduct hearings and make investigations on which to base proposals for legislation [4] The fact that such a variety of interests made suggestions for reform to this committee indicates that the evils complained of were recognized by others than the farmers and that this was by no means a one-group or class movement James J. Hill spoke strongly for state terminal inspection for the purpose of correcting real evils and allaying suspicion, which he considered harmful to all concerned [5] The Minneapolis Chamber of Commerce, very interestingly, requested that action be taken against the transit tyranny and discrimination in delivery, buying and shipping of grain as enforced by Hill's road, the Manitoba [6] Oliver Dalrymple,

[1] *Record and Union*, March 28, 1884, p 1

[2] *Minneapolis Tribune*, Feb 27, 1886, p 4

[3] *Cf.* the list of bills introduced, as recorded in the *House Journal.*

[4] *Minn House Journal*, 1885, p. 37.

[5] *Minneapolis Tribune*, Jan. 21, 1885, p 5

[6] *Ibid.*, Jan. 13, 1885, p. 4.

operator of the largest wheat farm in the Northwest, a man of such business experience and acumen as to be heard with respect, protested against an indefensible system of grades and unjust and arbitrary grading, which were maintained by the monopoly at Duluth [1]

In his address to this legislature the governor made a suggestion for wheat grading which was quite an innovation To the ordinary tests, such as weighing and judging by the color and shape of the kernel, he proposed adding chemical analysis and baking tests [2] No grading in the wheat market had begun to approach such a degree of accuracy as these methods would have reached, nor could it at the time, as there was not enough scientific knowledge on this problem and it would have been very expensive and difficult to have developed such a system of grading to a point where it would have been effective [3] But, nevertheless, the suggestion was important, for it showed how crude the methods were by which wheat values were determined. This whole matter of grading and inspection was considered a vital problem by the governor, for "while everyone must recognize the fact that the inexorable law of supply and demand as a rule governs values of all food products in the great markets of the world, yet the matter of inspection and grading has much to do in adjusting and determining such values" [4]

A comprehensive beginning in market reform was made in the enactment of two laws, one on warehouses and the

[1] *Minneapolis Tribune*, Jan 24, 1885, p 3

[2] Governor Hubbard spoke as an expert, for he was a miller

[3] Note the efforts of Dr Ladd (late senator from North Dakota) to attack the grading problem in this way thirty years later Also the research work of the Minnesota state mill

[4] Message of Governor Hubbard, Jan 7, 1885, *Minn. Ex. Docs.*, vol 1, pp. 38-39

other on railroads The former was essentially like that of Illinois All elevators and warehouses located at Minneapolis, St Paul and Duluth in which grain of different owners was mixed and which did business for a compensation were declared public warehouses They were to be licensed and bonded and were made subject to supervision by the railroad and warehouse commissioners, for whom provision was made by the railroad act[1] These warehouses were required to receive, to the extent of their capacities, all grain in good condition which was offered for storage, such grain to be weighed and inspected by duly qualified assistants of the commissioners One reinspection would be made, the complainant paying a small charge if the original decision were reaffirmed Grading was to be based on "Minnesota Grades," which should be established by the commissioners at the beginning of each marketing year Maximum storage rates were prescribed, the charge not to exceed 4 cents from November 15 to May 15 Warehouses were to determine their rates once a year, advertise them in the papers and post them in the warehouse The mixing of grain of different grades was forbidden, though grain could be cleaned with the owner's consent Warehouses were to report weekly, under oath, to the warehouse registrar, giving the amount of different grades received, stored and shipped; daily reports were also required The form of warehouse receipts and the conditions under which they were issued were elaborately specified The issuing and canceling of all receipts should be reported to the registrar, who was thus able to supervise this important function of the public warehouse All scales used for weighing grain which was subject to state inspection were to be tested by scale inspectors, who also were appointed and controlled by the commissioners This board was given a mild kind of supervision over

[1] *Minn Gen Laws*, 1885, ch. 188.

the grain interests of the state and was instructed to furnish samples of state grades to any warehouse or elevator in the state on request [1]

Transportation rates and the larger problem of the relations of elevators and railroads were attacked by the other act The board of three commissioners, referred to above, was established This body, to be appointed by the governor, was given extensive duties and some powers of enforcement It was to receive annual reports from the railroads, inspect their property and affairs, visit each station at least once in every three months, and, whenever necessary, require additional reports from the railroads and examine their records Like earlier laws, it forbade all discrimination in granting elevator sites, in distributing cars and in determining rates For a rental of $1 a year the roads were required to permit any person to construct and operate a grain elevator or warehouse, regardless of capacity, at any way station and were required to provide side tracks The order in which cars should be allotted was prescribed The distinctive feature of the law was the revival of the idea of a board of commissioners to hear complaints, adjust them, and, in disputes which could not otherwise be settled, initiate suits against the roads [2]

The purpose of this legislation was to secure a free market at country points by breaking down favoritism on the part of the railroads, to secure regular, reliable and reasonably cheap warehousing at terminals and to destroy irregularities in the weighing, inspection and warehousing of grain Some of these aims were in a measure realized; others were not Difficulties immediately arose which were due to the nature of the problems, the action taken by the roads and warehouses, and defects in the laws. This is seen from a consideration of the working of the new regulations

[1] *Minn Gen Laws*, 1885, ch 144

[2] *Ibid*, 1885, ch 188

State grades were established in the fall of 1885 For wheat, these were no 1 hard, nos 1 and 2 northern, no. 3 spring, no grade and rejected, according to the weight, kind and certain obvious qualities of the grain Before this, grades had been established by grain exchanges in the state, these now protested vigorously against state grades, which, they asserted, upset their grading and disturbed the reputation held by Minneapolis and Duluth grades in other markets Undoubtedly, changes in grades cause some confusion in the grain trade, but grades had been revised by Minneapolis and Duluth exchanges and were by no means regarded as being permanent It was also maintained that state grades afforded more opportunity for manipulation Since they were narrower than the grades displaced, there was some truth in the charge, but the remedy was obviously not to be found in a return to wider spreads in grades but rather in the development of the technique of grading These objections were, however, short-lived, and within a year state grades were acceptable even to their earlier opponents, were finding favor in other markets and were conceded to have established greater uniformity throughout the state in the matter of grading [1]

Considerable difficulty was met in working out the problem of terminal weighing, inspection and warehouse control As has been noted, before 1885 there was no public supervision of the grain trade in Minnesota's terminal markets [2]

[1] *Report, Minn Rail. and W'house Coms*, 1885, in *Minn Ex Docs*, 1885-86, vol. ii, pp 374-396, *Report, Minn Rail and W'house Coms*, 1886, p 9, *Minneapolis Tribune*, Sept 11, 1885, editorial, and Aug 25, 1886, p 3; *Report, op cit*, 1894, pp 55-57

[2] In this chapter the terms "terminal" and "primary" markets are used interchangeably, as "terminal" connotes a more definite distinction from the local markets when the trade within the state is considered, while "primary" designates more particularly the first large assembling point in a world system

Rules for trading and warehousing were made by the Minneapolis Chamber of Commerce and the Duluth Board of Trade Those rules were primarily intended to secure honesty among the grain men in their dealings with each other and to build up the reputations of these markets in the larger wheat centers, they were in no sense particularly favorable to the farmers except that a certain measure of regularity was bound to have some general value Inspection and weighing were under this system obviously biased, mixing and " doctoring " of grades was done by the warehousemen, to their own gain but to the loss of others Warehouse charges were high, and open competition did not exist in the storage business On the whole, there was considerable room for improvement

The personnel of the state system consisted of a chief inspector and a chief weigher and their assistants in each of the terminal markets and the state warehouse registrar These were in no way interested, personally, in the grain trade, and the inspectors had no regular means of learning the ownership of the grain which they inspected.[1] Because of the provision that they be wholly disinterested, it was impossible to get highly skilled personnel from the very first.

The earliest opposition to this state system came from the terminal warehousemen Many grain men in Minneapolis and even a larger proportion in Duluth, where most of the warehouses were public, fought the measure providing for state regulation During the first year the Duluth Board of trade reluctantly cooperated with the state, and its elevators all applied for license [2] But that the Board was op-

[1] *Report, Minn Rail and W'house Coms*, 1885, in *Minn Ex Docs*, 1885-86, vol ii, pp 9-12, *Report, Minn Rail and W'house Coms*, 1886, pp 9, 24-27; *ibid*, 1887, pp 32-34 and 1889, p 94

[2] *Report, op cit*, 1885, p 373, Federal Trade Commission, *Grain Trade*, vol. iii, p 144.

posed to any political interference is indicated by the following quotation from one of its reports

Politics and the grain business can no more mingle than oil and water Shippers have tested this truism since last May and we believe will ask the next legislature to repeal the law and allow practical business men to inspect and warehouse their own grain, and do away with a cumbersome "political scheme" and relegate politicians to a field more in harmony with their own ability [1]

In Minneapolis and St Paul the situation was different The elevators in Duluth were public in their business and, therefore, subject to state supervision But in the Twin Cities many elevators were owned by millers for storing their own grain and by warehousemen storing for themselves or for others in separate bins The millers claimed at first that state inspection was harmful to them in that it did not recognize certain milling qualities of the wheat which were essential to the making of good flour [2] Hence, many elevators refused to submit to state inspection and supervision and conducted their houses as private under the state law, although they were regular on the exchange.[3] In the first year of state inspection two elevators at Minneapolis, one at Minnesota Transfer (between Minneapolis and St Paul) and not any at St Paul applied for license [4] But in 1886 all the houses at these points submitted to state supervision.[5] Whenever the elevators whose business was not

[1] *Report, Duluth B T*, 1885, p 18 Chicago grain men thought the same when Illinois inspection was established

[2] *Report, Minn Rail and W'house Coms*, 1885, in *Minn Ex Docs*, 1885-86, vol ii, p. 373

[3] Except from 1889 to 1901 *Cf. Report, Minneapolis C C*, 1889, p 89 and 1901, pp. 17-18

[4] *Report, Minn Rail. and W'house Coms*, 1885, *op cit*, pp. 373-374, *Farm, Stock and Home*, vol v (Nov, 1888), p 2

[5] *Report, Minn Rail and W'house Coms*, 1886, p 26

strictly public found it to their advantage, they withdrew from state control, so that there was considerable irregularity as to what houses actually were supervised by the state[1] In 1887 the commission recommended that all elevators at terminals be declared public by law[2] This was not done Although many elevators preferred to do private business, they soon found it desirable to have state inspection By 1893 state inspection covered 14 railroad yards, 24 elevators and 22 mills at Minneapolis, 7 railroad yards, 2 elevators and 1 mill at St Paul, and 8 railroads yards, 8 elevators and 6 mills at Duluth-Superior[3]

State inspection and weighing were not entirely satisfactory to farmers and country-point wheat dealers Country weighing did not always agree with state weighing, but, generally, it was found on investigation that the discrepancy arose from defective scales at country points, from leaky cars or from losses in railroad yards[4] In such cases the local scales were tested and corrected, if wrong The charge was also made that the state inspectors favored the terminal wheat men As to the justice of this complaint it is difficult to say State inspection had to be close in order to maintain the stability and reputation of state grading After 1887 the charge was often made that high grades were being eliminated from Minnesota markets That this was not definitely the fault of state inspection is indicated by the fact that the percentage of grain in the various grades

[1] Message of Governor Merriam, Jan, 1893, *Minn Ex Docs*, 1892, vol i, p 23.

[2] *Report, Minn Rail and W'house Com*, 1887, p 34

[3] *Report, Minn Rail and W'house Com*, 1893, p 79, *Report, Minneapolis C C*, 1891, p 99

[4] Complaints are given in the reports of the rail and w'house com. Also, "Report of the Committee to Investigate into the Shipment and Handling of Grain," *Minn Senate Journal*, 1893, pp 466-467

fluctuated so decidedly from year to year and that there was a series of inferior crops for several years beginning in 1888 It is possible that the change from hard Scotch Fife to the softer Blue Stem also had something to do with it The millers generally thought the quality was deteriorating [1] On the whole, the system of terminal weighing and inspection was regarded as an improvement on the old way Even by its severest critics it was considered a step toward something which was essential to make the grain market function properly

To improve conditions in country markets was much more difficult. It was thought that state supervision in terminals would bring greater regularity and that the elimination of discrimination by railroads would result in competition, which was regarded as an unfailing regulator But both methods fell far short of these expectations The idea that the terminal system would improve the local markets presupposed that irregularities were due to the lack of definite standards and that country points would accept such when they were established There is no question that the difficulties were largely a reflection of the undeveloped standards and methods of measuring the value of different qualities of wheat in the central markets Even assuming the best intentions on the part of the local grain men, some irregularity was inevitable The failure of country markets to conform with improvements in terminals indicated, however, that it was regarded more profitable to grade in the old way. And there were no means of forcing regularity on the country markets The railroad law also broke down to a certain extent in the matter of warehouse sites and

[1] *Cf Report, Minn Com of Statistics*, for these years; *Report, Minn. Rail. and W'house Com*, 1890, in *Minn Ex Docs*, 1890, vol iii, pp 463-464; *ibid*, 1892, pp 60-62 and 68-70; *Report, Minneapolis C. C.*, 1887, p. 73, 1889, p 85 and 1892, pp 5 and 170

freight services, but, even where there was free shipping, conditions were not entirely satisfactory

At first it was confidently asserted that the railroad act had destroyed the collusion between the railroads and elevators which was such a serious matter in local markets [1] But in the enforcement of this act serious difficulties arose One important part of the law was soon challenged The roads had generally maintained from the earlier years that they were the sole judges as to whether a warehouse site should be granted, and some had even prescribed regulations concerning the size and the kind of elevators built on their land Nevertheless, by 1886 every road but one had made concessions in regard to this contention, and farmers' organizations, as well as others who had found it difficult to secure sites, were beginning to think they would have no further trouble [2] But the Chicago, Milwaukee and St Paul, true to its traditional policy, refused to accept the law In a suit brought against the road by the railroad and warehouse commission—the Barry case—the state supreme court held the provision concerning sites to be unconstitutional [3] It said that "lands acquired by a railroad company for the purposes of its enterprises are, as far as the right of property is concerned, private property" and that this could not be taken from them without adequate compensation [4] The commission then tried to solve the difficulty in another way It proposed a law providing for condemnation proceedings in cases where sites were refused, but the legislature did not respond to this suggestion Finally, they encouraged the

[1] *Report, Senate Select Committee on Interstate Commerce*, 49th Cong, 1st Sess, *Senate Report*, no 46, p 111, *Minneapolis Tribune*, Jan. 11, 1887, p 4

[2] Senate Com, *op cit*, p 111, *Report, Minn Rail and W'house Com*, 1886, p 11, *Fergus Falls Journal*, Jan 28, 1886, p 4

[3] *Minn Gen Laws*, 1885, ch 188, sec xv

[4] *36 Minn*, p 402

Farwell Farmers' Warehouse Association, which had been denied a site, to build an elevator on land adjacent to the station land and to request that a side track be given them When this was also refused, suit was started against the road in 1889 Four years later the case was decided by the state supreme court in favor of the association, the court holding that, while railroads could not be forced to grant sites to everyone, they should not discriminate to the extent of refusing to give one what they had granted under exactly similar circumstances to others, and that when discrimination had been made, it was proper for the association to demand a side track[1] Meanwhile the roads had become more arbitrary than they had at first been, and the farmers, seeing the weakness of the commission in the face of the opposition of the railroads and decisions of the courts, began to demand more drastic legislation

The act of 1885 had also required that the roads should on reasonable request furnish transportation for all grain stored or offered for shipment in any way, and prescribed an impartial method for the allotment of cars[2] Although some improvement was made, difficulties also arose in the working of this provision Frequent and loud complaints were made to the commission concerning discrimination in the matter of cars This problem arose in large measure from the fact that the roads were unable to meet the demands for cars in the fall marketing season Lack of storage on the farm and in the country markets, the farmers' need of money in the fall and the fact that the risks and costs of storing were not sufficiently compensated for by the difference in the fall and spring price, all helped to throw a large proportion of the crop on the market immediately after harvest, thus bringing on serious congestion in the

[1] *55 Minn*, p 8.

[2] *Minn Gen Laws*, 1885, ch 188, secs vi-ix

local and terminal markets and on the railroads In 1886 50 per cent of the tonnage for the year was carried by the Manitoba in three months [1] In September of that year this road had calls for 32,121 cars and could furnish only 7,352 [2] At one time in the same fall a certain road had twelve hundred loaded cars in Duluth, while only forty could be emptied in a day [3] The same conditions prevailed in other years when the crop was large Obviously, the equipment of the roads and terminals was inadequate to meet such an enormous inflation in traffic The roads maintained that they could not carry enough cars throughout the year to meet a temporary demand Both roads and terminals attempted to facilitate their handling of grain, but even so there was considerable difficulty [4] The law in question had, however, only stated that there should be no discrimination in the allotment of available cars Many shippers failed to see the problem brought by the enormous demands on the carrying capacity of the roads, but there is no question that the roads did not fully observe the law, for deliberate discrimination continued to exist This was particularly true of the Manitoba, which found it desirable to favor the regular shippers This road asserted that it was forced to serve those first who would delay the cars least, who had the heaviest investments in elevators, who gave the largest and most continuous business to the road and who permanently served the larger number of people The commission agreed with the Manitoba in 1886 that it was right in doing that which meant the greatest good for the greatest number [5]

[1] *Report, Minn. Rail and W'house Com*, 1886, p 95

[2] *Ibid*, p 94

[3] *Ibid*, p 160

[4] *Report, Minneapolis C C*, 1890, p 178 and 1891, p 225.

[5] *Report, Minn Rail and W'house Com*, 1886, p 100

The flat warehouse owners and the track loaders were the ones who generally complained The roads held that their slow loading delayed the moving of cars [1] But they were the very ones who were most dependent on prompt car service, for they had little or no storage There were three types of track loaders the farmer shipper, the agent of a terminal buyer and the more or less transient scooper, also called "scoop shoveler" and "track buyer" These preferred track loading because it saved the elevator charge Many did not wish to load through elevators because they were not certain of receiving the same quality of grain.

Of all, the scoopers were most strongly discriminated against by the railroads The roads held that they were not always reliable and that they demoralized the market The scoopers were, it is true, a somewhat undependable lot [2] They did not provide a regular market, and they were often deliberately dishonest And since they were so mobile, it was difficult to fix responsibility on them But their very mobility made them serve as an effective spur on the regular buyers in a town The railroad and warehouse commission maintained that it was not the business of the roads to determine whether a shipper demoralized the market [3] But the railroads feared any tendency to disturb the market When the rivalry of two roads had reached a certain point of equilibrium, the appearance of a track buyer or an aggressive independent at a station on one of the roads might force the price up at that point and precipitate a struggle by attracting grain from the territory of the other road or causing its patrons to demand lower freight rates [4] The

[1] *Report, Minn Rail and W'house Com*, 1886, pp 95-100

[2] An illustration of this type is found in *ibid*, 1891, pp 60-61 and *Farm, Stock and Home*, vol vii (Oct, 1891), p 387 The object of this buyer was simply to force the line to pay him to stay away

[3] *Cf Report, Minn Rail and W'house Com*, 1887, p 87

[4] For cases of this type on the Milwaukee, the N P and the Manitoba

roads preferred, therefore, to deal with the larger lines, which would pursue a more regular policy and be more amenable to the road's wishes because of their larger fixed investments

The roads furnished the farmers cars whenever they could, and there was a definite increase in farmer shipping Large farmers like Dalrymple had shipped earlier, but in the later eighties the practice became much more common for smaller ones, who found that they at times made several cents a bushel by shipping[1] But certain things tended to limit such shipping It was difficult for one farmer or even a group to load a car in a day, and then there was a possibility of losing on a falling market, from leaky cars or unreliable commission men The most important effect, however, of farmer shipping came not from the amount shipped but from the influence which the possibility of shipping had on the local markets

One of the most persistent problems of the railroad and warehouse commission was the matter of transportation rates The railroad act of 1885 had forbidden all types of rate discrimination The Wabash decision destroyed any expectation which the commission might have had in the way of regulating rates on goods shipped out of the state and limited state control definitely to intra-state traffic[2]

Before noting developments within the state, it is well to consider what was done to modify rate conditions and

Minneapolis Tribune, Nov 10, 1887, p 2, *Fergus Falls Journal*, Nov 10, 1887, p 4, *Farm, Stock and Home*, vol vii (Nov, 1891), p 5, quoting the *Melrose Sun*, and vol vii (Dec, 1891), p 38, *Report, Minn Rail and W'house Com*, 1886, p 101, 1887, pp 87 and 99, 1889, p 98 and 1894, p 16, *Great West*, May 27, 1892, p 2, quoting a minority report of a committee of the legislature to investigate the grain trade

[1] The large farmers seemed to have had no difficulty in getting cars at any time The Minneapolis and Pacific was especially favorable to farmers This was a new road in excellent territory.

[2] *118 U S*, p 557

what the situation was for traffic beyond state control The problem was attacked in two ways One was the reappearance of the demand for improved water transportation A committee of the Minnesota legislature recommended improvement of the Mississippi and of the northern lake route to the ocean—an early Great Lakes-St Lawrence proposal It also suggested that the Red River be connected with these routes [1] Nothing in particular came of these propositions though they were not forgotten An attempt was made in the early nineties to test the feasibility of lakes-to-Liverpool shipping, when a boat carrying 80,000 bushels of wheat was sent from Duluth to Liverpool, lighting its load down a portion of the St Lawrence, at a cost of 12½ cents a bushel [2] By 1887 sentiment in Minnesota was decidedly in favor of federal control of inter-state commerce, and a joint resolution was passed by the legislature requesting Minnesota's congressmen to support the pending bill [3] But this act was very soon regarded as ineffective and, in the words of Alliance speakers, " as dead as a door nail "

But even so, distinct changes were made in wheat rates to the seaboard There was considerable competition on the part of Chicago and the two northern routes Carriage on the lakes was cheapened by the improvement of the boats, particularly by the appearance of whalebacks in 1888 and of J J Hill's steel steamers in the early nineties [4] The completion of the Duluth, South Shore and Atlantic in 1888

[1] "Report of the State Committee on the Improvement of the Mississippi," in *Minn Ex Docs*, 1886-87, vol v, pp 83-87

[2] "Waterway from the Head of Lake Superior to the Sea," com on interstate and foreign commerce, 52nd Cong, 1st Sess, *House Report*, no. 185, p 2.

[3] *Minn Gen. Laws*, 1887, p 395

[4] Baker, "Hist of Transp. in Minn.," *Minn Hist Soc Coll*, vol ix (1901), p. 22; *Report, Duluth B T*, 1893-94, p 120

provided an all-year route from Duluth eastward[1] A rail route particularly significant to Minneapolis was the Minneapolis, Sault Sainte Marie and Atlantic, which reached in 1888 from Dakota by way of Minneapolis to Sault Sainte Marie, where it made connections with other roads[2] For some time this line was the greatest single factor in bringing about lower rates eastward[3] In 1888 40 per cent of the flour shipped from Minneapolis was sent by way of Lake Superior and this railroad[4] The Chicago roads were forced to meet this competition In 1891 the Chicago, Burlington and Quincy, the Chicago, Milwaukee and St Paul, the Chicago and Northwestern and the St Paul and Kansas City—all interested in Minnesota traffic—established a through-billing rule to the seaboard with the privilege of holding forty-eight hours in Chicago for sale or inspection[5] But competition was not always so active as this would seem to indicate Combinations and associations of the different roads were made and were broken[6] The rates also depended on the shippers, for the more powerful ones got better terms For alternate years from 1886 to 1892 the average rates on a bushel of wheat from Minneapolis to New York by way of Chicago were, by lake and rail, 16 5, 18 5, 13 2 and 13 59 cents, and by all rail, 21, 19, 18 80 and 19 80 cents At a charge equal to the price of a bushel of no. 1 hard wheat, 5 70, 6 86, 8 03 and 6 93 bushels could be carried to New York by the former, and 4 56, 5 55, 5 99 and

[1] *Report, Duluth B T.*, 1888, p 30

[2] *Articles of Consolidation of the Minneapolis, Sault Ste Marie and Atlantic, the Minneapolis and Pacific, and the Aberdeen, Bismarck and Northwestern Railway Company*, 1888

[3] *Report, Minneapolis C C*, 1889, p 166

[4] *Ibid*, 1888, p 138

[5] *Report of the Industrial Commission*, vol x, p 303

[6] *Report, Minneapolis C C*, 1890, p 178

4 77 bushels by the latter route[1] This indicates that, although there was a definite decline in rates to the seaboard in those years, the gain was largely neutralized by the fall in wheat prices

Although the commission had no power over freight shipped out of the state, it did exercise some control over traffic within the state It immediately began to hear complaints and make adjustments on the basis of investigations The first significant accomplishment was the abolition of the transit rate system, except as a voluntary expedient; another was the lowering of charges on the Manitoba, after a thorough investigation which found that the rates were unreasonably and unnecessarily high[2] But the changes effected by the commission were not sufficiently drastic to satisfy the farmers, who maintained that the roads should bear a part of the burden of lower wheat prices by further reducing their charges This attitude was especially marked in 1886; the Alliance took a more aggressive position than had been taken since the Granger period Characterizing the roads as "coagulated stealage", the resolutions of the Alliance convention demanded that

> the legislature shall exercise the power which the Supreme Court of the United States has time and again affirmed it possessed to regulate freights upon the railroads of the state so as to give those who have settled in this section of the country a fair chance for an honest living[3]

[1] Prices annual average of no 1 hard as given in the *Report, N Y Prod Exch*, 1891-92, p 58 and 1892-93 p 58 for 1888 to 1892, and estimated for 1886 on the basis of the price of no 2 Chicago spring and the average excess of no 1 hard above no 2 C spring from 1887 to 1889

Rates *Report, N Y Prod Exch*, 1892-93, p. 72, *Report, Minneapolis C C*, 1886, p 108 and 1890, p 178, *U S Dept Agric, Div Stat, Misc Ser, Bul 15*, p 50

[2] *Report, Minn Rail and W'house Com*, 1886, pp 10, 55-68.

[3] The resolutions were published in the *Minneapolis Tribune*, Feb. 26, 1886, p 3

Influenced by the strength of the Alliance, the legislature passed a second railroad act in 1887 This act defined unjust discriminations very specifically, like its model, the Interstate Commerce Act, and restated the old demand that rates should be equal and reasonable. Schedules were to be announced in newspapers, posted in stations and filed with the commission Changes could be made on ten days' notice only The commission should visit and inspect each station once a year A uniform system of accounts was prescribed, and regular reports were required The unique feature of this law was the power of enforcement given the commission If a road failed to comply with an order of the commission, the proper court should issue a writ of injunction against it, considering the order of the commission as *prima facie* evidence of the reasonableness of the order.[1] This law, also, was challenged by the Milwaukee in its refusal to lower milk rates on a short section of its line south of the Twin Cities The court immediately issued an injunction against the road, which appealed to the state supreme court It decided in favor of the law, but on appeal the United States Supreme Court declared that section of the act unconstitutional which gave the commission the power to determine the reasonableness of a rate[2] A quotation suggests the basis on which the decision was rendered

It [the act] deprives the company of its right to a judicial investigation, by due process of law and substitutes therefor, as an absolute finality, the action of a railroad commission which . . cannot be regarded as clothed with judicial functions or possessing the machinery of a court of justice . . . If the

[1] *Minn Gen Laws*, 1887, ch x

[2] *38 Minn*, p 281, *134 U S*, pp 456-458 Justices Bradley, Gray and Lamar dissented, saying that this decision practically overruled the Granger cases, which had for their governing principle that the regulation of rates was a legislative not a judicial prerogative

company is deprived of the power of charging reasonable rates for the use of its property, and such deprivation takes place in the absence of an investigation by judicial machinery, it is deprived of the lawful use of its property . without due process of law and in violation of the Constitution of the United States [1]

This decision was severely criticized in Minnesota It practically reversed that in the Granger case, the Winona and St. Peter Railroad *v* Blake, which held the Jones bill, establishing maximum freight rates, to be constitutional [2] The most aggressive opposition came from the Farmers' Alliance, as will be seen later

But even with its power of enforcement lessened, the commission exerted considerable influence over rates It provided the machinery for hearing complaints, for investigating and for recommending changes In 1888 a uniform distance tariff on carload lots was established In 1890 rates on the Great Northern (the former Minneapolis, Manitoba and Pacific) and the "Soo" were reduced on complaint of the Grant County Alliance In 1893 the commission won in the case of Steenerson and the Great Northern after a long fight in the courts, and rates between several Red River points and Duluth, St Paul and Minneapolis were lowered [3] The long- and short-haul clause of the act of 1887 was acquiesced in generally by the roads, and discrimination between the smaller towns practically disappeared [4] Nothing in particular was accomplished in the way of reducing rebating and pooling, though the practice was eliminating itself under the pressure of public opinion

[1] *134 U S, op cit*

[2] *Cf supra*, p 108

[3] "Changes in Railroad Rates in Minnesota," 59th Cong, 1st Sess, *Senate Reports*, no 102, pp 2-6

[4] *Report, Minn Rail and W'house Com*, 1887, p 17

and because of the increased prosperity and independence of the roads A most effective illustration of the fact that the commission was regarded with some respect by the roads is found in a request from the Winona and St Peter, a "granger" road, for a change in its rates "This", reports the commission, "is the first instance in our experience where the commission has been requested by a common carrier to signify its approval of a freight tariff before the same has gone into effect"[1]

There was considerable reduction in rates in those years which cannot be attributed directly to the legislation of 1885 and 1887 The constant improvement in the road bed and in the machinery and methods of handling freight and the fall in prices of materials reduced operating costs The enormous expansion in trade due to the development of Minnesota and its neighbors to the west further cut costs per unit of freight handled The Great Northern, which had started a 10-mile run in 1862 from the trading town, St Paul, to the sawdust villages, St Anthony and Minneapolis, by 1890 counted its deliveries of wheat at Minneapolis and Duluth in tens of millions of bushels, the larger part of which was raised in Minnesota[2] The building of additional roads and branches increased competition[3] This is illustrated by the Minneapolis and Pacific, which was built west and northwestward from Minneapolis across territory

[1] *Report, Minn Rail and W'house Com*, 1890, p 78 The Winona and St Peter was the most recalcitrant road in early years

[2] The reports of the railroad and warehouse commission and of the Minneapolis Chamber of Commerce record this change In 1895 the G N delivered at these terminals 67,000,000 bushels of wheat, according to J. J Hill "Hist of Agric in Minn," *Minn Hist Soc Coll*, vol viii, p 285 The *Report of the Duluth Board of Trade*, 1889, p 29, states that in the current year the earnings of the N P had increased 50 per cent and its mileage 11

[3] The mileage grew from 4,226 42 miles in 1885 to 5,863 89 miles in 1893, according to *Report, Minn Rail. and W'house Com*, 1905, p 143

tributary to the Milwaukee, the Northern Pacific and the Great Northern This road was built to combat the last two, which favored Duluth [1] In the long run, the roads must have been influenced by the fall in wheat prices in order to maintain the volume of their traffic, but the lack of agreement in the rise and fall of wheat prices and of rates at any one time seems to indicate that the relationship between the two was not close

The most extensive reductions occurred from 1885 to 1887 The year 1891 marked a return to slower reductions.[2] Even with considerable decrease, the rates were comparatively high In 1890 the charge for a bushel of wheat was 10 5 cents for a 300-mile haul on the Northern Pacific and 4 5 cents for the 400-mile haul from Minneapolis to Chicago [3] Therein lay the secret of much criticism of railroads in Minnesota This point is further illustrated by a comparison of average rates on a number of roads

AVERAGE RATES A TON A MILE[4]

In cents

	1885	1890	1893
New York Central	0.688	0 730	0 701
Chicago, Milwaukee and St Paul	1 278	0.995	1 026
Chicago and Northwestern	1 194	0 977	1 028
St Paul and Duluth	1 198	0 651	0 733
Minneapolis, St Paul and Sault Sainte Marie		0 961	0 962
Great Northern	1.711	1 411	1 234
Minneapolis and St. Louis	.. ..	1 430	1 330

[1] *Minneapolis Tribune*, April 23, 1887, p 4

[2] *Cf* figures in *Report, Ind Com*, vol vi, pp 89-94

[3] *Report, Minn. Rail and W'house Com*, 1890, p 18

[4] *U S Dept Agric, Div Stat, Misc Ser, Bul 15*, pp 19, 20, 24 and 26 Also statements of rates on individual roads in the reports of the railroad and warehouse commission

The roads west and northwest of Minneapolis, which charged the highest rates, were the ones most severely criticized That was the territory in which the Alliance was strongest

Nothing effective had been done by the state to interfere in the local wheat trade An entirely different method of reform appeared in 1885—the cooperative farmers' elevator movement Farmers' cooperative wheat marketing had been tried in Minnesota as early as the sixties, and later by the Granger movement The reappearance of this cooperative idea in 1885 is particularly significant, as it was the beginning of a successful and permanent farmers' marketing movement Its coming at that time must be attributed, largely, to the railroad act of that year, which required impartial granting of elevator sites

Farmers' cooperatives were organized on different railroads but mostly in the northwestern part of the state On the Milwaukee two were organized in 1885, at Alden and Wells, and two in 1886, at Delaven and Blue Earth City.[1] These all disappeared within two or three years On the Northwestern a Farmers' Association appeared at Canby in 1885 and at Elgin in 1888, the latter running for but a short time[2] A cooperative wheat-marketing association was organized by business men of Dawson on the Minneapolis and St Louis in 1885[3] This was the type of elevator which the line companies and independents opposed more than any other, for they maintained that the merchants or

[1] List of elevators, their owners and proprietors on the C, M and St P in *Report, Minn Rail and W'house Com*, 1885 and 1887 Also, *Farm, Stock and Home*, vol iii (Oct, 1887), p. 339 Note that the Farmers Union, Farmers' Mutual and Farmers' Elevator Company were private lines, and not farmers' organizations

[2] *Report, op cit*, 1887 and 1888, *Lease Records of the C. and N. Railway*

[3] *Minneapolis Tribune*, Dec 24, 1885

other townsmen were merely championing the farmers in order to win their trade On the Great Northern a farmers' elevator appeared at Garfield in 1887[1] More cooperatives were organized of this time on the Northern Pacific than on any other road, and those were all in Otter Tail County They were organized in 1885 at Battle Lake and Underwood, and in 1886 at Wall Lake, Fergus Falls and Vining[2] These seem, on the whole, to have been the most successful of all organized then

The early farmers' wheat-marketing cooperatives were small concerns, often only flat warehouses The capacity of the houses ranged from 3,500 to 20,000 bushels; but they handled more grain than this might indicate, for since they did not make a practice of storing, the warehouses served mainly as receiving and shipping houses and could handle considerable grain[3] All had very limited resources Most of the smaller towns had no banks at the time, and the farmers furnished capital only to the extent of their shares

The method of conducting those early cooperatives is best illustrated by describing that of one, the Underwood Grain Association, which was one of the earliest to be organized The members of the company were farmers and townsmen of the community It was in no way directly affiliated with the Alliance or any other farmers' organization, though it was undoubtedly in part a result of Alliance influences. Each member had one vote regardless of the number of shares he owned No dividends were declared The man-

[1] *Report, op cit.*, 1887 There were elevators at Litchfield and Willmar called the Farmers' Elevator Company which seem not to have been real cooperatives

[2] *Report, op cit*, 1885-1887 Farmers' Elevator Company at Hawley and Wadena may have been real cooperatives

[3] The cooperative at Blue Earth City handled 48,762 bushels of wheat and 9,945 bushels of oats in one year, according to the *Farm, Stock and Home*, vol iii (Oct, 1887), p 339.

ager and buyer was a farmer who received no fixed salary but a commission of 1 cent a bushel The warehouse consisted of a six-bin elevator, each bin holding a carload If a farmer had enough to fill a bin, his wheat would be stored separately Otherwise, it was stored with grain of the same grade, belonging to other farmers, until there was sufficient to fill a carload, and then it was shipped. Hedging was never used in the early days When prices were steady or on an upturn, the grain was sold on arriving in the primary market, if prices were fluctuating, the grain received at the farmers' elevator was sold daily "to arrive". On receipt of payment for grain which had been shipped, the manager paid the farmers the full amount brought by their grain, minus freight and commission charges[1] In this way the association could conduct business without much capital and with practically no risk At the same time it was unable to make certain gains which greater resources, a more specialized management and a larger organization enabled the line elevators to make But the value of such cooperatives could be measured not only by the direct savings to the farmers but also by the effect on other grain buyers

These were the principal developments which had their roots in the early years of the market-reform movement. They brought some improvements in Minnesota's grain trade, but they failed to accomplish as much as had been expected. The partial failure of these reforms and the appearance of new problems aroused the dissatisfied to a greater extent in 1890 than ever before

So significant was this second strong wave of agrarian discontent that at least a brief consideration of it is neces-

[1] For like information the writer is indebted to a number of men who took part in the early cooperative movement—most especially to H. J Bjorge of Duluth, who was the first secretary of the Underwood Association.

sary to an understanding of attempts to improve wheat-marketing conditions in Minnesota in the early nineties. This movement was decidedly self-conscious, and its attacks on the marketing system were more inclusive than the earlier one had been The program which it sponsored was more extreme in that it sought not only to limit the power of the middleman but to displace him entirely

The class consciousness of this movement expressed itself by emphasizing the importance of the farmer and by contrasting the growing wealth of some people and the relatively greater poverty of others Daniel Webster's statement concerning the importance of the farmer to society and civilization became the keynote of many appeals This idea was elaborated to fit existing conditions and was undoubtedly made more inclusive than those writing in earlier economic stages would have advocated had they lived under the later conditions The following quotation from a moderately aggressive spokesman of the dissatisfied illustrates this point·

> Aside from this ethical view of the subject is the fact that upon the farmer the nation depends for everything But for him the waters of the ocean, lake and river would never be troubled by passing keel, the rumble of railroad trains never be heard; factory engines would be pulseless and chimneys smokeless; but for the farmer cities would be hamlets, sky-piercing buildings unknown, and the colossal private fortunes of the day impossible When this great necessary class is dissatisfied . . the time has arrived when real statesmen, journalists, students and patriots will carefully study existing conditions [1]

Not only was the farmer important—he, admitting the laborer as part sharer of his position, was the essential producer of wealth Thus a philosophical and economic justification for agrarian discontent was formed.

[1] *Farm, Stock and Home*, vol viii (Aug, 1892), p. 322.

This insistence on the importance of agriculture became all the more emphatic in view of the growing extremes in the wealth and power of certain classes or groups On every hand was found evidence of the growing wealth of certain men It was said that in the Minnesota wheat trade seventy men had each made a million within twenty years [1] The death of A J Sawyer of Duluth was commented on by a contemporary newspaper with the suggestion that there was something wrong in a system which made it possible for a wheat dealer to accumulate in a few years a sum which a farmer making $5,000 a year, an unheard-of sum for them, would have to toil two thousand years to gain [2] Then there was constant reference to the bankers, speculators, manufacturers and railroad men, mostly of New York, who were absorbing the wealth produced by the farmers But the farmers were pictured as poor They could not have the necessities of life, not to mention its luxuries To some it appeared that "great red lines are drawn between poverty and wealth" [3]

The idea became prevalent that there was a class of capitalists who were economically and politically dominant In the Granger period the "heartless monopolies" and "soulless corporations" were generally more or less local wheat rings and railroads, which, it was thought, proper regulation would control Rarely was Wall Street mentioned By 1890 it was different The trust had been born There was talk of trusts *ad infinitum*—of the whiskey trust, the sugar trust, the barb-wire trust, the beef trust, the steel rail trust, the glass makers' trust, the oil trust, the paint trust and the wheat trust The wheat farmer sold his grain to a buyer who was merely an agent of a line,

[1] *Record and Union*, June 27, 1890, p 2, quoting an Alliance speaker

[2] *Farm, Stock and Home*, vol VIII (March, 1892), p 149

[3] *Great West*, Aug 2, 1892, p 3.

which was supposed to be in collusion with the railroads and a part of the Minneapolis flour monopoly having enormous resources of its own and close relations with local and eastern bankers The local elevator agent was likened to a spider crouched in the web, waiting for the fly—the farmer [1] The real issue, said Donnelly, was whether the dollar or the man should rule [2]

The first problem seemed to be that of finding the leak between the consumer and producer where so much of the value of the wheat was drained off This led to investigating the difference in Minnesota and Liverpool prices and the marketing costs A veritable wheat-price war was waged for three years The attack was led by the *Great West,* the most aggressive reform newspaper, and was supported by other papers and by politicians The millers, large wheat merchants and conservative newspapers refuted the charges The controversy started in the spring of 1890 when the *Great West* announced that there was a difference of 54 cents in the price of no 1 hard wheat at Crookston, in the Red River Valley, and at Liverpool, of which difference 20 cents was given as the cost of reaching the latter place, thus leaving 34 cents to be accounted for [3] C A Pillsbury replied by giving figures for transportation, insurance, primage, commissions and transfer charges from Duluth to Liverpool, totaling 23 5 cents [4] This did not include interest charges or risks from price fluctuations According to Pillsbury's own figures, said the *Great West,* there were from 26 to 28 cents gained by someone [5] A robbery of even 10 cents a bushel, it was said, meant a loss

[1] *St Paul Daily Globe,* Aug 22, 1892, p 4

[2] *Great West,* Jan. 8, 1892, p. 4.

[3] *Ibid*, March 21, 1890, p 1

[4] *Great West,* April 25, 1890, p 1.

[5] *Ibid*

of $180 a year to every farmer in the state[1] The *Great West* later maintained that from September to December, 1891, the difference between wheat prices at Millville and at Liverpool was 36 cents above costs[2] The next year the claim was made that from 30 to 40 cents were stolen from the value of the wheat between Minnesota and Buffalo.[3] Like price comparisons with similar conclusions continued to be made The millers and wheat merchants insisted that the figures were wrong[4] But the irrefutable reply was that they had made their millions

On the basis of these comparisons many effective campaign arguments were built up Donnelly claimed that a billion dollars had been stolen from Minnesota and Dakota farmers in twenty years[5] A more conservative critic of the wheat men, T C Hodgson, said that not 30 but 10 cents a bushel was a fairer estimate, which made $4,000,000 a year on Minnesota's crop.[6] The appeal of such arguments was, naturally, strong

To what extent was this attack justified? This can best be considered by comparing such figures on actual prices and costs as are available

The data used by the *Great West* and its followers was not in all cases reliable The prices were often based on grades of wheat which were not comparable For instance, a certain figure given as the price of no 1 Duluth hard at Liverpool was estimated on the basis of the London price of

[1] *Great West*, March 21, 1890, p 1

[2] *Ibid*, May 6, 1892, p 1

[3] *Ibid*, April 8, 1892, p 1

[4] Minneapolis papers, the *Journal* and the *Tribune*, upheld their side; the *St Paul Pioneer Press*, more mildly, and the *Globe*, most emphatically supported the opposition.

[5] *St Paul Pioneer Press*, Sept. 19, 1892, p 4.

[6] *Farm, Stock and Home*, vol. ix (June, 1893), p 295.

no 2 Chicago spring[1] The reason for this was that Liverpool quotations for this grade very rarely appeared in the papers But there was some danger in estimating prices in this way, as the difference between prices on the Baltic and Mark Lane markets in London and at Liverpool and between the prices of various kinds and grades was not constant The figures on marketing costs given by the *Great West* were not accurate at all times In the spring of 1890 the cost of bringing wheat from Crookston to Liverpool was said to be 20 cents[2] Cost figures supplied by C A Pillsbury, which were substantially accurate, showed that the actual cost was 34 cents[3] These inaccuracies may or may not have been deliberate, it was most probably due to the fact that the editor of the *Great West* and those who quoted him were not familiar with the wheat-marketing system

The most satisfactory way in which to approach the actual situation is to compare wheat prices The following table gives cash prices for the same grades in the three markets with which the price controversy was concerned

[1] *Great West*, March 21, 1890, p 1

[2] *Ibid*

[3] *Ibid*, April 25, 1890, p 1

CASH PRICE OF NO 1 HARD SPRING WHEAT AND DIFFERENCE IN PRICES AT CROOKSTON, DULUTH, LIVERPOOL [1]

In cents a bushel

	Price at			Excess of price at		
	Crookston	Duluth	Liverpool	Duluth above Crookston	Liverpool above Duluth	Liverpool above Crookston
1890						
Oct. 14 ..	88	104 50	119 98	16 50	15 48	31 98
Oct. 21 ..	86	105 62	122 34	19 62	16 72	36.34
Oct. 28 .	87	103.00	122.34	16 00	19.34	35.34
1891						
Sept. 21 .	78	94.50	129.34	16.50	34 84	51.34
Oct. 15 .	82	97.50	124.12	15 50	26 62	42 12
Oct. 22 ..	77	94 25	123 58	17 25	29 33	46 58
Oct. 28 ..	79	95 25	123.58	16 25	29 33	44.58
1892						
Sept. 13 .	62	75.50	92.80	13 50	17 30	30 80
Sept. 20 .	62	73 75	92 22	11 75	18 47	30 22
Sept. 27 ..	62	75 00	95.12	13 00	20 12	33 12
Oct. 10 .	62	74 75	95 12	12 75	20 37	33 12
1893						
Sept. 30 ..	52	64.25	78 30	12.25	14 05	26 30
Oct. 7 ..	49	63 25	78 01	14 25	14 76	29.01
Oct. 16 ..	50	60 00	76 56	10 00	16 56	26 56
Oct. 28 ..	49	64.25	77 23	15 25	12.98	28 23

The difference in the prices at Liverpool and Duluth was very close to the marketing cost In the middle of the month of October this cost was approximately 17 9 cents in 1890,

[1] Prices for Crookston from the *Crookston Times* (weekly), 1890-1891, and the *Crookston Times* (daily), 1892-1893, for Duluth from the *Reports, Duluth B T*, for Liverpool from the *London Times*, 1890-1893 Since the standard source for market information from Liverpool, Broomhall's *Corn Trade News,* which the writer used through the courtesy of D J Broomhall of its New York office in the Produce Exchange, did not quote prices for this grade, it was necessary to rely on newspapers (there being no other source from which to obtain this particular information) Duluth no. 1 hard was quoted very infrequently on the Liverpool market Specific dates are given, as usable averages were not obtainable

29 9 in 1891, 24 86 in 1892 and 23 94 in 1893 [1] Comparing these costs with the difference in prices, it is seen that the gains were not large and that there was sometimes a loss [2] The considerable increase in Liverpool prices in 1891 was almost entirely absorbed by increased transportation costs [3] There was not, therefore, much justification for the charge of robbery, as far as price was concerned, between Duluth and Liverpool This was to be expected, considering the active competition of various markets and transportation routes for wheat But between Duluth and Crookston, on the other hand, there was a considerable difference which cannot be accounted for by legitimate costs There the critics of the grain market had a real grievance Everything considered, it was unreasonable that Crookston should be almost as far from Duluth, in the matter of price, as Duluth was from Liverpool There was generally a considerable margin above the freight rate, which was about 9.3 cents through those years [4] This freight charge, which was declared by the state supreme court after an extensive investigation by the railroad and warehouse commission to be unjust and unreasonable, was at times higher than the trans-

[1] Including all transportation, transfer, commission, insurance and primage charges The two last were estimated on the basis of C. A Pillsbury's figures in *Great West,* April 25, 1890, p 1, the rest were secured from reports of the Duluth Board of Trade, the Buffalo Merchants' Exchange and the New York Produce Exchange, and the *Monthly Summary of Commerce and Finance,* Bur of Stat, U. S Treas Dept, Jan, 1900, p 2066

[2] *Cf Report, Minn Rail. and W'house Com*, 1899, pp 26-27 This gives very complete and reliable figures on prices and marketing costs, showing that from 1893 to 1896 the Liverpool price was at times as low as 12 35 cents below and as high as 1 88 cents above the Duluth price

[3] This difference in Minnesota and English prices at that time was made much of by market critics.

[4] According to testimony in a case in district court quoted in *Report, Minn. Rail. and W'house Com*, 1893, p 45 and in *60 Minn.*, p 462

portation charge from Duluth to Liverpool[1] The whole situation indicates that the farmers had a real cause for complaint in the local situation That was sufficient to justify action on their part without accepting definite misrepresentations of conditions.

Another type of evidence was advanced to prove that the wheat middlemen were robbing the farmers Certain letters written by Minneapolis wheat interests to the *Crédit Lyonnais* (a French banking concern) showed that terminal elevators were making high profits One, written by C. A. Pillsbury in 1889, stated that for the past six years the Minneapolis and Northern, the largest terminal house in Minneapolis, had made an average of 30 per cent on a capital of $825,000, the Empire had made 40 per cent for several years, the Northwestern 22 per cent for five years, G. W Van Dusen probably more than any other and the remaining large companies had made considerable This was contrasted with another letter written about the same time by Mr. Pillsbury to a Mr. Arnold of Larimore, who had inquired about the advisability of starting an independent elevator at that place It would not be wise, said the former, to do so, for their elevators had not paid well—there was too much competition and risk, and their losses had been "fearful"[2] The conclusion drawn from comparing the two letters was that line elevators and terminals were making enormous profits, which they wanted to maintain by keeping out competition. There was much truth in this Yet it must be remembered that much of a line's profits came from having space and equipment which

[1] *60 Minn*, p 462

[2] The letters appeared in the *Great West*, Jan 23, 1891, p 1, *St Paul Globe*, Sept 18, 1892, p 1, *Farm, Stock and Home*, vol viii (Oct, 1892), p 374, and were quoted in other papers Pillsbury seems never to have denied that they were genuine

enabled it to carry the grain longer, to clean and "doctor" grades, and from the resources and business methods of a large, efficient system The Minneapolis wheat interests asserted that even with large dividends they made only 1¾ per cent on the amount of business done[1] Considering the time and distance values which they added, this was not a large profit compared with the cost of marketing other products One thing must be considered which is often overlooked The wheat men of Minneapolis were highly selected, for most of them had been in Minnesota's wheat trade from early years Their ability was unusually high and gave them a certain kind of monopoly Further, having established their reputation for business integrity, they were able to get loans on low terms, which enabled them to carry on an enormous business on a relatively small capital. But these very facts gave them a certain measure of monopoly, of which they were willing to avail themselves, after the manner of the time

Speculators were blamed, in a somewhat different way, for low prices While the regular grain warehousemen and merchants were thought to get more than their share of the value of the grain, speculators were said to depress that value Speculation, which had become almost synonymous with Chicago wheat trading, had had a bad reputation in Minnesota since the early seventies, and sensational "corners" and persistent activities of "bucket shops" had brought attention more and more to that market At first it appeared that the development of Minneapolis and Duluth would free Minnesota from Chicago's brigandage, but in the late eighties a new attitude arose in regard to the influence of Chicago. This speculative market *par excellence* was said to determine the price of wheat—not only in its

[1] *St Paul Pioneer Press*, Sept 22, 1892, p. 4.

own vicinity but even in Liverpool [1] This was said to be due to the enormous amount of option dealing and short selling at Chicago, which was thought to depress the market [2]

The way in which speculation depressed prices was frequently illustrated by a hypothetical case of dealing in "wind" horses Since this so typically represents current arguments, one writer, who used this illustration, is quoted

> Let us suppose that horses are "graded" like wheat In a market are a hundred horses of a certain grade for sale, there are also buyers for so many horses The owners of the horses offer them at $100 each; but immediately some man, who never owned a horse, shouts, "I will sell horses of that grade for June or July delivery for $95 each!" The horse owners may reduce their offer to $90, the man cries "$85!" and at that price, we will say, a hundred horses are sold, the buyers are satisfied, have bought all the horses they need or have money to pay for, and the day's business closes. The market for horses has been depressed 15 per cent; the moral effect of the depression will probably produce a decline of 5 to 10 per cent more in a few days, when the man who sold the hundred horses will buy them in, probably buy the same horses that would have sold for $100 each but for himself, turns them over to his buyers, pockets the difference, and is ready to repeat his tactics next horse-market day The horses sold are "wind" horses, but the effect on flesh and blood horses is the same as if they had been real. The same rule applies to "wind" wheat and the same effect is produced [3]

The fallacy in the above quotation, as in so many of this nature, is that ofttimes speculative prices are determined

[1] This view is expressed in a minority report of a committee of the legislature to investigate the grain trade, as quoted by the *Farm, Stock and Home*, vol viii (April, 1892) and *Great West*, May 6, 1892, p 2.

[2] This was one point on which the market critics and the millers of Minneapolis agreed

[3] *Farm, Stock and Home*, vol viii (June, 1892), p 257.

without reference to demand and supply There is no evidence which proves that speculation permanently depressed prices It might cause temporary deflations in wheat values, but the reverse might also happen[1] Arguments like the above generally showed a striking lack of understanding of the functioning of the whole system of trading in futures The feature most persistently attacked was the so-called illegitimate option dealing, but, popularly, that included all trading in futures

In 1886 the National Farmers' Congress in convention at St Paul passed a resolution asking legislatures to prevent dealing in futures unless it were the bona-fide intention of the seller to deliver and the buyer to receive[2] But the idea did not rise to the prominence of a real issue before 1890, when it was taken up by the Alliance Then a widespread demand appeared for federal and state legislation to curb speculation

On these general themes thousands of variations were made Every feature of the market was attacked and discussed There was also much talk of free silver and some of the tariff, but the strongest cohesive force in the farmers' movement in Minnesota's wheat region was found in the myriads of real or supposed problems that appeared in the marketing of wheat[3] Further attempts were made to reform the market by economic organizations of the farmers, closely associated with the Alliance, and by legislation, which was furthered, largely, by the pressure of reformers organized as a third party

[1] *Cf* Bemis, "Discontent of the Farmer," *Jour Pol Econ*, vol i (March, 1893), p 207; Boyle, *Chicago Wheat Prices for Eighty-One Years*, Emery, *Speculation on the Stock and Produce Exchanges of the United States*, Stevens, "Futures in the Wheat Market," *Quar. Jour. Ec*, vol ii, p. 37

[2] *Appleton's Ann Cyc*, 1886, p 332

[3] By far the best source on this is the *Farm, Stock and Home.*

A significant political development occurred in 1890 The Minnesota State Farmers' Alliance nominated a state ticket[1] Laborers were invited to strengthen the Alliance; in the state convention 53 of 505 delegates were from trade unions[2] The program proposed was significant Ultimate state ownership of railroads and warehouses was suggested as a remedy for conditions which state supervision had failed to improve sufficiently, in the meantime, the old laws on these problems should be retained Another new feature was the suggestion that grading at country points should be abolished Grain should be stored and shipped, without mixing, to terminal markets to be graded by the state Action on option gambling was suggested And the old demands for free and open markets were again made[3] In the election, S A Owen, editor of the *Farm, Stock and Home,* got 58,000 votes for the governorship, while the Republican and Democratic candidates polled 88,-000 and 85,000, respectively It is significant that a leading wheat county, Otter Tail, which had formerly returned large majorities for the Republicans, now gave most of its votes to the Alliance candidate One Democratic-Alliance man was sent to Congress and the fusion candidate was elected state auditor To the state senate were elected 27 Republicans, 15 Democrats, and 12 Alliance men, to the house, 40 Republicans, 41 Democrats, and 33 Alliance candidates[4] Though the Republicans were nominally the strongest group, the Democrats and the Alliance were agreed in their attacks on the wheat market

[1] Smalley, *History of the Republican Party and Political History of Minnesota* (St Paul, 1896), p 232

[2] *Ibid.*

[3] *Norman County Herald,* July 25, 1890, p. 1; *Great West,* March 14, 1890, p 8; *Record and Union,* June 25, 1890, p 1

[4] Smalley, *op cit*, pp. 235-236, *Appleton's Ann. Cyc*, 1890, pp 556-557.

In 1892 there was a split in the Alliance. Politically, it was practically absorbed by the Populist Party, although it continued to exist as an organization[1] The program of the Populists was about like that of the Alliance in 1890, except that a demand for a state warehouse at Duluth, which had been made by the Alliance in 1891, was added It was expected that wheat should be stored in this warehouse, unmixed, at cost[2] The tidal wave of Populism came near depriving the Republicans of control of the legislature But Ignatius Donnelly, the Populist candidate for governor, was less successful than Owen had been in 1890[3] Although this seems strange, it can be attributed in part to the fact that the Alliance did not wholly go with the Populists, to distrust of Donnelly, to the promises of the Republicans, who stole some of the thunder of their opponents, and to the fact that Knute Nelson was nominated for governor by the Republicans, who were not unmindful of his being moderately liberal and Scandinavian Nevertheless, because of their strength in the legislature, the Populists were able to influence legislation to a considerable extent in 1893[4]

In 1894 the opposition elements united, Owen again being nominated for governor The Republicans by then, however, favored not only railroad and warehouse control but also bimetallism They succeeded in reelecting Knute Nelson by a bare majority of all votes cast, and they won heavily in the legislature The protest movement had, evidently, passed its peak[5]

[1] *Crookston Tribune*, Oct 4, 1892, p 4 This shows that the feeling between the two was not entirely friendly

[2] *Great West*, Jan 9, 1891, p 8, *Norman County Herald*, Jan 9, 1891, p 1.

[3] Smalley, *op cit.*, p 242

[4] *Ibid.*, pp 238, 242-244; *Appleton's Ann. Cyc*, 1892, p 47 and 1893, p 497. In this election Minnesota gave Harrison 122,000 votes, Cleveland 100,000, Weaver 30,000 and Bidwell 14,000

[5] *Appleton's Ann Cyc.*, 1894, pp 490-491.

The legislatures of 1891 and 1893, like those of 1885 and 1887, aggressively attacked marketing problems The comparative inertia of 1889 gave way under the pressure of the Alliance and Populist groups, supported to some extent by the Democrats

To improve conditions in the terminal markets, an act was passed in 1893 which provided for the building of a large elevator by the state at Duluth [1] A site had been secured, and provision had been made for the erection of the building, when the law was declared unconstitutional by the state supreme court, on the ground that the erection of a state elevator for public storage was not an exercise of the police power of the state to regulate the business of receiving, weighing and inspecting grain in warehouses The court held that it had "no relation in the regulation of the business but provides for the state itself engageing in carrying it on" [2] Nothing further was done for several years in regard to terminal problems The Alliance and the Populists wanted popular election of members of the railroad and warehouse commission, but this was not seriously considered at the time [3] On the whole, the commission seemed to be satisfactory to most farmers

Two laws were passed to limit the power of railroads, inasmuch as earlier laws had been broken down by court decisions An act was passed in 1891, carrying out a suggestion made earlier by the commission, which provided that the commission could secure an injunction against roads disregarding its decisions, while the roads were given the right to appeal to a district court from the order of the commission [4] This was a slow and expensive process, but,

[1] *Minn Gen Laws*, 1893, ch 30, secs 1-11

[2] *56 Minn*, pp 100-102, 118

[3] This had been proposed as early as 1886 by the State Alliance convention (*Minneapolis Tribune*, Feb. 26, 1886, p 3).

[4] *Minn Ex Docs*, 1890, vol 1, p 3, *Minn. Gen Laws*, 1893, ch 106, secs. iii-iv

since the courts were very favorable to the commission and from 1893 through the years with which this study is concerned never reversed an order that was appealed, the prestige of the board became so strong that appeals were not often made[1] The position taken by the court in the case of the Farwell Farmers' Warehouse Association, and a law passed in 1893, which provided for condemnatory proceedings when sites for elevators were refused, broke the legal position of the railroads in maintaining that they had complete control over the granting of sites.[2] The enactment of this law had been repeatedly urged by the commission and by others, it had passed the senate in 1891, but had failed by two votes in the house[3]

The country trade presented one of the most tenacious problems in regard to the wheat market After all, that was the most important for the farmers, because fully 90 per cent of their grain was handled by country elevators[4] It was claimed, with a great deal of truth, that the state terminal system protected only the buyers of wheat It had been expected that supervision at terminals would have brought greater regularity at country markets, it had also been expected that control of railroads, to secure equality in shipping, would have improved conditions But neither of these expectations had been realized by 1893

Although irregularities on the part of railroads had some effect, the strongest factor in maintaining undesirable conditions at country points was the power of the line elevators. It is well, therefore, to note at this point the position of those middlemen

[1] *Cf* "Changes in Railroad Rates in Minnesota," 59th Cong, 1st Sess, *Senate Report*, no. 102

[2] *Cf supra*, pp 181-182; *Minn Gen Laws*, 1893, ch 94

[3] *Report, Minn Rail and W'house Com*, 1891, p 14

[4] *Report, Minn Rail and W'house Com*, 1892, p. 66, quoting the grain investigation of 1892, *ibid*, 1894, p 36

The essential features of the line-elevator system had appeared throughout the state by 1885 Since then, it increased in power—not necessarily in number but in strength [1] This was especially true of the elevators on the Minneapolis and St Louis, the Great Northern, the "Soo" and the Northern Pacific [2] By 1888 the elevator system of the state had become definitely centralized in Minneapolis and St Paul, a few strong houses had, nominally, their headquarters in Duluth and a number of less important ones at Winona, but much of their trading was done at Minneapolis [3] From this city the country trade was financed and price reports were distributed [4] Powerful companies could not afford to compete among themselves and tried to prevent others from competing No small independent, unless he had an especially loyal patronage among the farmers, could withstand the methods of lines bent on destroying him. With their extensive resources the lines could bid over the single independent and freeze him out, while they retrieved their loss at some less fortunate place

The country problem was attacked at this time by legislation on country markets, by a general prohibition of pooling and by farmers' marketing organizations

Action on the country elevator question was finally taken

[1] Some of the larger lines increased their capacity, while others lost Some were already beginning to move into Dakota, disposing of their Minnesota houses

[2] Lists of elevators in *Minn Rail and W'house Com*, 1888, also, *Lease Records* of railways Note that the St P, M and M (Manitoba) became the Great Northern at this time

[3] *Cf Report, Minneapolis C C.*, 1887, p 82, and 1888, p 45

[4] The testimony of Mr Sawyer in the *Hearings before the Com on Agriculture* (52nd Cong, 1st Sess) *upon the Subject of Fictitious Dealing in Agricultural Products*, Feb 3-18, 1892, is very good in this relation One of the elements of strength of the line was its ability to get loans, it being more reliable than independents *Cf 35 Minn.*, p 99 and *42 Minn*, pp 43-44

by the legislature in 1893 Different proposals had been made for handling the problem In 1887 the railroad and warehouse commission had asked for some means of attacking irregularities on complaint [1] By 1890 the more aggressive element in the Alliance opposed any system of country supervision, and favored shipping directly to terminals where the grain should be inspected by the state Others favored a comprehensive system of state inspection at local points [2] But this would have entailed an enormous expenditure, and would have brought serious administrative difficulties in the maintenance and supervision of scores of state employees Even though such a scheme could have been worked out, it was not desirable, for the cases of injustice could not have been sufficiently serious to justify burdening the state with this great expense

By 1893 the complaints from country districts, the pressure of reformers in the legislature and the conviction on the part of certain conservative leaders that something had to be done forced action In his farewell address Governor Merriam emphasized the need of legislation, for he believed that there had been much discrimination in dockage and grading to the detriment of the wheat districts But he gave a note of warning in that he deprecated the "too great tendency to seek remedies for ills that are impossible to cure, through legislative enactment" [3] Governor Nelson, who was as familiar as anyone with the difficulties, recognized that "the ordinary farmer, he who is unable to ship in carload lots, and is obliged to sell his grain by the wagon load to the local dealers—and most farmers belong to this class—

[1] *Report, Minn Rail and W'house Com*, 1887, p 13, and 1894, pp 35-36.

[2] The earliest suggeston of this kind was the one made by the Alliance convention in 1886 (*Minneapolis Tribune*, Feb 26, 1886, p. 3).

[3] Message of Gov W R Merriam, 1893 in *Minn Ex. Docs.*, 1892, vol i, p 21

he has no umpire, either as to weight, grade or dockage" The governor favored "some plan, neither restrictive nor burdensome, placing all grain elevators and warehouses, doing public business, under state inspection and state supervision, to the end that the state may effectively and beneficially mediate between the warehousemen and the farmer"[1] He worked hard for an act embodying this idea Its enactment was secured in a measure which extended the commission's jurisdiction over local markets to the extent that all elevators outside of terminals were required to be licensed and to report to the commission, and that the commission should receive complaints, investigate and, if necessary, redress the wrong by bringing action in the courts Pooling the business at country points was also prohibited[2] This act was a distinct compromise, which was, in the main, a recognition of the fact that the wheat market had developed beyond legislative control But it did provide one thing which had been regarded for years as necessary: an impartial arbitrator in disputes between farmers and wheat buyers This act was replaced by another in 1895 which further extended and defined the power of the commission[3]

The state was given definite control over scales in country markets In 1891 the terminal weighing system was extended to St Cloud in order to facilitate the handling of grain at terminals.[4] And two years later the state was given exclusive control of country scales, unless the shipper requested otherwise[5] This meant that the state weighmaster could test any scales used in the wheat trade, without any specific complaint having been made

[1] Inaugural address, Gov Knute Nelson, *ibid*, p 43

[2] *Minn Gen Laws*, 1893, ch 28

[3] *Minn Gen Laws*, 1895, ch 148

[4] *Ibid*, 1891, ch 99

[5] *Ibid*, 1893, ch 130

Two other reforms were enacted, which were important not so much for what they did as for what they tried to do In the state elevator act of 1893 provision was made for an elaborate system by which the railroad and warehouse commission should disseminate market information Wheat prices at Liverpool, London, Paris, Hamburg, Quebec, New York, Buffalo, Chicago, St Paul, Minneapolis and Duluth, and freight charges to these markets, should be reported weekly In order to make prices comparable, samples of Minnesota wheat were to be sent to these markets so as to determine how their grading corresponded with Minnesota's [1] Although the act was nullified by a decision of the supreme court, the commission did publish some market information in various newspapers [2] An interesting set of measures was passed from 1891 to 1893 to put into effect an anti-monopoly amendment to the state constitution The amendment was as follows

> Any combination of persons, either as individuals or as members of any corporation, to monopolize the market for food products in this state, or to interfere with, or restrict, the freedom of such markets, is hereby declared to be criminal conspiracy, and shall be punished in such manner as the legislature may provide [3]

Though the amendment and the laws for its enforcement did not seem to have any particular effect, they bear witness to the optimism of those who saw in legislation an immediate cure for all ills

Nothing was done in regard to speculation This was

[1] *Minn Gen Laws*, 1893, ch 30

[2] *56 Minn*, p 100; *Report, Minn Rail. and W'house Com*, 1896, p 56.

[3] *Minn Gen Laws*, 1889, p 1 and 1891, ch. x and 1893, ch 125, and 1895, ch. x; *Appleton's Ann Cyc*, 1888, p. 560; *Minneapolis Tribune*, Feb 26, 1886, p 3, *Northern Tier*, April 10, 1886, p 5

beyond Minnesota's control, for the center of speculative trading was at Chicago The Washburn Anti-Option bill, to prohibit the more speculative type of trading in futures, was considered in Congress but was not passed[1] The Minneapolis millers and many Populists supported it, some large farmers and Alliance men were, on the other hand, opposed to the measure The discussion brought on by this bill served to increase the feeling that there was something wrong in the large markets But the opposition to the bill indicated that there was, at least on the part of some, a clear comprehension of the function of speculation in the wheat market.

The conviction was growing that legislation, alone, would not bring the desired reforms While some maintained that the remedy for all economic ills lay in the proper use of the ballot, others saw that legislation had to be supplemented with economic organizations of the farmers

The earlier cooperative movement of 1885 to 1888 has been noted[2] A second one, which was largely the result of the work of the Alliance, was more or less active from 1889 to 1893 This differed from the former in that it tried to establish farmers' elevators in terminal markets also The motive behind this attempt is suggested by a contemporary newspaper, the *Northfield News,* which said that the farmers were learning

> the lesson that capital began to learn long ago—the tremendous power of cooperation. "In union there is strength" Each individual farmer has stood alone for generations, and is to-day doing the same And because he stands alone he is singled

[1] The *Hearings before the Com on Agric* (52nd Cong, 1st Sess) *upon the Subject of Fictitious Dealing in Agricultural Products,* Feb 3 to 18, 1892, gives the result of the investigation brought on by the Washburn bill Senator Washburn was a miller of Minneapolis

[2] *Supra,* pp 193-195

out and forced to contribute to a powerful combine The *News* would be glad to be able to announce that the farmers of Minnesota . had established and definitely fixed the exact amount of cereals that should be produced and could thereby determine as autocratically the price of their products as the managers of a railway can fix the terms of transportation Until the farmers learn thoroughly the lessons of combination and the irresistible strength of perfect union they will be and remain the shuttlecock of chance and the plaything of corporate monopoly [1]

A number of attempts were made to put this idea into practice [2] The first project was a Dakota concern, the Scandinavian Farmers' Elevator Syndicate, which served as a pattern for others of this nature This organization aimed to secure as members a number of country elevators and to have agents at terminals to move the wheat from farmers to miller at the lowest cost of handling and in its purity as grown [3] It was not wholly a farmers' company at first, though it was largely made up of Alliance people, but by 1889 it had attracted wide attention among the Alliances and was declared a successful type of farmers' organization by the executive committee of the middlewest National Farmers' Alliance [4] This company did not long continue According to its supporters, it was killed by the suspicion of the farmers, the opposition of elevators and the refusal of the Minneapolis Chamber of Commerce to grant it membership [5]

[1] *Northfield News*, quoted by the *Great West*, Feb 21, 1890, p 1

[2] Ignatius Donnelly suggested that the Alliance establish township mills to sell flour directly to labor unions (*Great West*, March 14, 1890, p 2).

[3] *Minneapolis Journal*, April 17, 1888, p 1

[4] *Ibid*, April 17, 1888, pp. 1 and 3, and editorial, May 26, 1888, *Svenska Folkets Tidning*, May 19, 1888, p 7, *Farm, Stock and Home*, vol. v (April, 1889), p 167 and Aug 15, 1889, p 310, *Great West*, May 16, 1890, p 1. This organization seems to have attempted to sell shares to eastern and British millers

[5] *Farm, Stock and Home* and *Great West*, *op cit*

The next was the Alliance Elevator Company, also organized by Red River farmers This was a very ambitious organization, for it aimed to secure a capital of two million, to build terminal houses at Minneapolis and Duluth and to establish lines of locals An elevator was secured at Minneapolis, but this failed within a year The manager, who was none too scrupulous nor competent, attributed the failure to the " invisible system " which prevented the elevator from obtaining membership on the exchange and which made the elevator and commission men refuse to deal with an organization outside of recognized channels [1] There seems to have been considerable truth in that allocation of the difficulty The large grain men were opposed to any restraint on their affairs and were ready to fight the farmers as well as the state But the organization was decidedly unfortunate in that its management had neither the ability nor the temperament for coping with such a difficult situation

Other organizations were somewhat more successful The Northwestern Farmers' Protective Association, also a Red River group, secured small elevators at West Superior and Duluth, and had a few local cooperatives as members This was more conservative than the Scandinavian Syndicate or the Alliance Elevator Company It was even admitted to membership on the Duluth Board of Trade [2] The most conservative in its plan and the most successful was the Grain Growers Association organized in the early nineties Though it aimed to secure terminal elevators in time, its first emphasis was local It encouraged the building of

[1] *Great West*, March 21, 1890, p 7, May 16, 1890, p 1, Feb 13, 1891, p 4

[2] *Ibid*, July 17, 1891, p 1 and May 13, 1892, p 5, *Farm, Stock and Home*, vol vii (Sept, 1891), p 344 and vol viii (1892), p 129, membership list in *Report, Duluth B T*, 1893 One terminal elevator was friendly to such projects, the Great Northern elevator at Duluth, which offered to handle grain for this company at special rates (*Representative*, Aug 15, 1894, p 1)

farmers' elevators at country points, and criticized and attacked the methods and practices of the wheat middlemen [1]

None of these terminal cooperatives were definitely successful This is partly explained by their lack of capital and experience and by the hostility of the grain men It was also due to the fact that they got very little grain to handle. A grain investigation conducted by a committee of the legislature showed that 90 per cent of the grain shipped from local points was handled by the elevators [2] Of the 5 per cent shipped directly by farmers, some was sold to millers and terminal wheat dealers before shipping A small amount remained for which the farmers' houses could bid And the farmers would not consign their wheat to organizations whose success had not been proved The terminal cooperatives expected to draw trade from country cooperatives, the weakness of this plan lay in the fact that there were very few farmers' elevators at the time The cooperative movement which had been active from 1885 to 1887 had subsided [3] Most of the elevators were discontinued, and it appears that very few new ones were established No grain elevator sites were granted nor leases renewed for farmers' cooperatives on the Great Northern and the Minneapolis and St Louis from 1890 to 1897 A few were leased and re-leased by the Northwestern at that time Records of the other roads have been destroyed or lost [4] A few small

[1] *Representative*, May 16, 1894, p 5 and July 18, 1894, p 1

[2] *Report, Minn Rail and W'house Com*, 1892, p 66

[3] *Cf supra*, pp 193-194

[4] About the only authentic source for information on cooperative elevators at this time is the *Lease Records* of railways For the late eighties and the nineties the writer used the records of the Chicago and Northwestern at Chicago, the Minneapolis and St Louis at Minneapolis and the Great Northern at St Paul. These were the only roads which had preserved their records in complete form Isolated points were secured from the *Report, Minn Rail and W'house Com*, 1892,

houses might have been established adjacent to the railroads' land, but of such there are no records On the whole, there was not enough grain shipped by farmers or by their cooperatives to support terminal cooperatives

Though the cooperative movement had not accomplished much directly, it had helped the farmers to gain a clearer comprehension of the function of the wheat-marketing organizations and of the methods and problems of the system This was essentially a period of experimentation From it the farmers also learned that it was not wise to enter terminal markets in their present stage of development, but that they actually could accomplish much by small, individual ventures in country markets

The reform movement which started in 1885 has continued to some extent ever since, but it has never again been so active as it was during its first years In those years it accomplished considerable that has been of great importance in Minnesota's wheat trade The distinctly *laissez faire* attitude of the state was changed to a comprehensive policy of supervision and interference This helped restore the balance between the producer and the middleman which had been so completely upset by the development of powerful marketing agencies The new system brought definite changes and improvements There still remained, however, a large sphere of market activity which it had not touched.

p 83; *Minneapolis Journal*, Aug 28, 1890, p 5; *Farm, Stock and Home*, vol vii (Sept, 1891), p 344, and *Great West*, July 17, 1891, p 1 The writer had interviews and correspondence with a large number of men interested in this movement in its early stages, but very little useful material was secured in this way

CHAPTER VIII

BIG BUSINESS IN THE WHEAT TRADE, 1895-1900

ALTHOUGH the wheat market has developed by a process of gradual change, it has been characterized at different times by certain dominant elements in such a way as to divide its history into definite periods After the heterogeneity of the early river years came successive steps marked by control on the part of packets and railroads, dominance by millers and their agents and interference of producers and the state. Toward the end of the century, the years with which this chapter is concerned, the most significant aspect of the wheat market was the combination and integration of market agencies This was the result of the development of certain forces in the market, and it stimulated a counter movement on the part of the producers, already effective, which was to become the distinguishing feature of the next period

The ascendancy of big business in Minnesota's wheat market at this time was the result, in the main, of three factors continued development of market methods and organization; pressure of low price, on the one hand, and of the demands of producers for market reform, on the other; and increased competition in the grain trade

Large market organizations were made possible by the improvement in managerial ability through experience, the availability of capital in large amounts, the assumption of a large part of the risks by a specialized speculative class and the development of machinery for storing, handling and carrying wheat in large quantities Such organizations were made necessary by the increased complexity of the market

due to the enormous expansion of supply and demand, which required highly trained and specialized middlemen, who could be supported only by a large volume of business

There were certain factors forcing this development The income of the middlemen was attacked from all sides Wheat prices in the consuming markets had been falling for several years until the last month of 1896, when they rallied and increased until 1898, and were then followed by a two-year period of lower prices [1] Middlemen attempted to meet the pressure of lower prices and the accompanying demands of producers for cheaper marketing by increasing the size of their business and by uniting different functions in the market, in order to bring about greater efficiency in their business and to strengthen their hold on the supply area so as to secure a large volume of grain and maintain their margin

The greatest obstacle confronting the middlemen was inter-market and intra-market competition, of which there was considerable in Minnesota The market groups which had bid for wheat (those groups consisting principally of transportation lines, storage interests and grain dealers) were, in the order of their appearance, St Louis, Milwaukee, Chicago, Minneapolis and Duluth And like interests within a market were often competitors among themselves, especially in places which had developed beyond their supply or whose supply was decreasing But in order to maintain their position against other markets, they were forced to combine or to drive off competitors and to reach out for control of the supply area. The changes which the farmers so strongly opposed were those attempts to eliminate inter- and intra-market competition

In the period with which this chapter is concerned, three primary markets were actively competing for Minnesota's

[1] *Annual Reports, N. Y Prod Exch*, wheat prices

wheat. Chicago, Minneapolis and Duluth Their relative importance is indicated by the following table

ANNUAL WHEAT RECEIPTS, CHICAGO, MINNEAPOLIS, DULUTH [1]

In millions of bushels

	Chicago	Minneapolis	Duluth
1891	42.9	57 8	40 4
1892	50.2	92 7	46 6
1893	35 3	57 8	32 9
1894	25 6	55 0	32 2
1895	20.6	65 4	48 6
1896	19 1	69.5	56 6
1897	28 0	72 8	48 0
1898	35.7	77 1	62 2
1899	30 9	87 9	54 9
1900	48 0	83 3	31 9

Through this series of years Chicago was losing and Duluth gaining somewhat, while Minneapolis was increasing its receipts by leaps and bounds

There are a number of explanations for the change in the relative position of these markets The agricultural territory tributary to Minneapolis was adopting a more diversified system of agriculture, and there was a general shifting of the wheat area to the southwest and the northwest For much of the trade Chicago was no longer in the direct route to the consumer; and other markets were gaining what it was losing These markets also had the advantage of being nearer the wheat fields so that they could get grain less mixed [2] The newer areas had the added advantage of a choice of transportation routes In the spring-wheat

[1] *Report, Minneapolis C C*, 1900, p 27, *Report, Chicago B T*, 1901, p 20. The apparent loss at Minneapolis and Duluth in 1900 as compared with Chicago is in part explained by a poorer crop in the northern than the southern wheat region

[2] Much of Chicago's wheat came from these other markets, where it had been mixed

region there were two important routes the Duluth-lake-Buffalo route and the Chicago rail or lake-rail route Minneapolis could bid the two against each other, and was further aided by the " Soo " line, a railway independent of Chicago The Chicago roads attempted to meet competition by reducing their rates and by through-billing to New York with sale-in-transit privileges in Chicago[1] The most aggressive was the Duluth route, which also lowered its charges[2] The railroads had been strengthened by mechanical improvements, better road-beds and more efficient switching and transfer facilities The Duluth-lake route improved its boats and transfer facilities very considerably[3] One of the most important factors in bringing about the change in markets was the growing demand of the Minneapolis mills Their flour output increased rapidly, being 10,500,000 barrels in 1895 and 15,000,000 in 1900[4] With its large investments in milling and its extensive flour trade Minneapolis had to have wheat It was, therefore, the most aggressive factor in the spring-wheat trade This is indicated by the fact that the amount of wheat handled in this market fluctuated less according to the crop than the amounts received in Chicago and Duluth[5]

These three markets, which were directly competing for

[1] *Industrial Commission*, vol vi, p 71, *Commercial West*, July 20, 1901, p. 25; *Report, N Y Prod Exch*, 1901-02, p 274.

[2] Lake rates are recorded in *Reports, Duluth B T*

[3] The earlier lake boats carrying 30,000 bushels of wheat had been loaded in a day, in 1901 Peavey's boats carrying 250,000 bushels were loaded in two hours (*Commer West*, July 20, 1901, p 25, Interstate Com Com, *Testimony on the Grain Trade*, 59th Cong, 2nd Sess, *Senate Document*, no 278, p 848)

[4] *Report, Minneapolis C C*, 1900, p 127

[5] J J Hill in Interstate Com Com, *op cit*, p 855 In the *Annual Reports of the Duluth Board of Trade* mention is invariably made of influence of Minneapolis on the receipts at Duluth, and of its encroachment on the territory of the latter in years of short crops

wheat, were forced to take steps to strengthen their position This was done by attempts to cut marketing costs and to gain control of the supply area In order to accomplish this, intra-market competition had to be weakened Two middlemen groups were especially interested in strengthening their markets the railroads, whose traffic depended on one or two markets, and the warehousemen or millers, who of all the grain men had the largest fixed investments Commission men, speculators and others were more mobile and, therefore, less dependent on any one market

Chicago was compelled to take the defensive By market competition its dominance over Minnesota's wheat trade which the Granger movement had so ineffectually criticized was being broken down Through-billing from points west of Chicago to the seaboard threatened its storage, and even this did not serve to attract enough business for Chicago's railroads [1] And the public warehouses were in danger from competition of mixing and cleaning houses [2] Therefore, the roads allied themselves with certain powerful warehousemen for mutual assistance in forcing the grain to Chicago This was done by a drastic parceling out of Chicago's grain trade and of the producing hinterland The roads leased their large warehouses to certain warehousemen, many of whom were officers or directors of the roads, promising to deliver to them grain shipped on their line and to give the warehouses special privileges, if they would help bring grain to Chicago [3] The chief aim came to be to accumulate and store in that place [4] In the country these warehousemen

[1] *Indust Com*, vol. x, pp 298-99, 303, *ibid*, vol vi, p 71, *Report, Minneapolis C C.*, 1897, p 15 and 1900, p. 55

[2] *Indust Com*, vol x, p 299

[3] Interstate Com Com, *Testimony on the Grain Trade*, 59th Cong, 2nd Sess, *Senate Document*, no 278, p 794, *Indust Com.*, vol. x, pp 296-297, 304-307 and vol iv, pp 81, 372-375

[4] *Ibid*, vol iv, p. 313

drove out or attempted to control other buyers, started new elevators and sent their agents out to buy They often destroyed local competiton, but it has not been proved that they became so powerful as to lower prices [1] These large warehousemen practically gained control of the wheat trade in Chicago By the middle nineties they owned most of the wheat there [2] They had a great advantage over other grain men in that they stored for themselves and could mix and "skin" grades in their own houses [3] They bought and sold grain and practically displaced the commission men. the grain dealers who had no warehouses and the warehousemen who did not deal in grain [4] The practice of public elevator men storing for themselves was declared illegal by a district court, a decision which was upheld by the state supreme court in 1898 [5] But this did not destroy the power of the warehousemen Instead of putting the grain which they bought in the country or on the exchange into the elevators as their own, they circumvented the law by selling the grain a trifle below market price, with the understanding that it be stored in their house, and buying it back on a future Though they lost on these deals, they got the grain for storage [6] However undesirable the system was, it succeeded in bringing grain to Chicago, for it was estimated

[1] *Indust Com*, vol iv, pp 314-315, 318-319, 359, 372-375 The large warehousemen were Counselman on the Rock Island, Armour on the Burlington, Bartlett, Frazier on the Northwestern, and Weare and Co on the Northwestern and Great Western

[2] *174 Illinois*, pp 205-206

[3] *Ibid.* p 205; *Indust Com*, vol vi, pp 70-71 and vol x, pp 301, 310-313, 315-319, Interstate Com Com, *op cit*, p 889 Armour had bigger mixing than public houses "Skinning" grades was the practice of raising a grade by mixing it with grain of a superior quality in the next higher grade so as to make the whole just within the higher grade

[4] Interstate Com Com, *op cit*, p 90, *Indust Com*, vol x, pp 305-312

[5] *174 Illinois*, pp 205-211

[6] *Ibid*, p 209, *Indust Com*, vol. x, p 301.

that 40 per cent of all the wheat brought to that market was forced there by this combination [1]

Duluth, likewise, was reaching out for grain As with the other markets, this was to a certain extent a matter of securing favorable railroad rates The Great Northern and the Northern Pacific in the northwestern part of the state generally kept the rates to Duluth and Minneapolis about equal, for these roads were interested in both markets If one city was favored, the other protested [2] Southwest from Minneapolis, Duluth met greater competition Its first victory in territory which was regarded as definitely belonging to Chicago was won in 1889 when the Northwestern put Duluth on the same basis as Chicago in Nebraska [3] It was also helped by the lowering of rates on the lake route [4] In Duluth, too, the grain trade tended to center in the warehouses So high was the cash market in Minneapolis because of the demands of the millers that the ordinary dealers and the shippers could not compete if they had to hold the grain for some time and pay storage One of the principal functions of Duluth as a market was to sell for future delivery and store during the winter months when the lake was closed But Duluth, like Chicago, had to cut costs and seek the grain In 1890 its four large elevators were all public and had little to do with the grain trade outside of storing, but by 1897 they were forced to enter the grain trade.[5] With their storage facilities they could trade on a lower margin than other grain dealers By 1901 almost

[1] *Indust Com*, vol vi, p 72

[2] Minneapolis was more generally seeking lower rates, according to the *Annual Reports of the Minneapolis C C.*

[3] *Report, Duluth B T*, 1889, p. 27

[4] Weekly rates are given in the *Annual Reports of the Duluth Board of Trade* and the *Annual Reports of the Buffalo Merchants' Exchange.*

[5] Federal Trade Commission, *Report on the Grain Trade*, vol iii, p. 144; *Report, Duluth B. T*, 1890, pp 109-110.

half of Duluth's terminals were private [1] They also worked to secure a larger quantity of grain on a smaller carrying charge Duluth's elevator capacity increased from 21,000,-000 bushels in 1890 to 34,000,000 in 1901 [2] Its terminal and country elevator system was to a large extent a part of that of Minneapolis The Peavey system, which owned almost a half of Duluth's storage in 1901, the Northern Grain Company and Cargill's country line companies with headquarters in Minneapolis controlled most of Duluth's storage [3] This made Duluth, to a certain extent, an ally of Minneapolis in the country markets

With the increasing demands of its mills Minneapolis was the most dynamic factor in the spring-wheat trade of the Northwest It represented a stronger permanent local demand than any other wheat market in the world It had to have a large regular supply An extensive shipping trade had also developed there, which took any surplus above that which the mills needed [4] Minneapolis tried to get its wheat supply by lowering its freight rates and costs of marketing and by controlling, to the greatest extent possible, the supply area by maintaining a strong position in the country markets

As far as rates to consumers' markets were concerned, Minneapolis was in an especially advantageous position It could bid a number of routes against each other, and it had powerful grain men who could bargain, individually, not only with routes to the seaboard but also with ocean carriers [5] In the country, however, other markets often secured more

[1] *Report, Duluth B T*, 1901, p 25 (no report for 1900), *Commercial West*, July 20, 1901, pp 22-23, *Indust Com*, vol x, p 856

[2] *Report, Duluth B T*, 1890, pp 109-110 and 1901, p 25

[3] *Commercial West*, July 20, 1901, pp 22-23

[4] *Report, Minneapolis C C*, 1900, p 55 Over 9,000,000 bushels were shipped in 1900

[5] Men like C S Pillsbury and F H Peavey and large mills and elevators.

favorable rates As noted before, Duluth and Minneapolis were shipping under about equal terms on the roads of the northwestern part of the state[1] The work of the state railroad commission was favorable to Minneapolis in that it abolished the transit rule and, to a certain extent, discrimination against the short haul on the part of Chicago roads in order to secure grain which might otherwise have gone to Minneapolis[2] But, even so, Chicago competed with Minneapolis in the matter of rates

In Minneapolis, as in other markets, individuals or groups tended to strengthen their position by increasing the volume of their business and by taking over a number of market functions This development was, however, by no means so complete as in Chicago There appears to have been little, if any, relationship between elevators and railroads in the nineties Except for rebates between competitive points, individual grain companies were not assisted by the roads[3] There is no evidence of any discrimination on the part of the roads in favor of storage companies leasing their elevators But the other agencies combined considerably For instance, by 1895 practically all the milling capacity in Minneapolis was owned by the Pillsbury-Washburn group, the Washburn-Crosbys and the Northwestern Consolidated[4] These mills did not have lines of elevators, but they had private terminal warehouses Many of the millers had,

[1] *Supra*, p 226

[2] *Cf supra*, p 188 and "Changes in Railroad Rates in Minn," 59th Cong, 1st Sess, *Senate Report*, no 102, pp 2-6 The *Reports, Minn Rail and W'house Com* discuss individual cases An excellent treatment of the position of Minneapolis in the matter of rates is found in a study by Mildred Hartsough, *The Development of the Twin Cities as a Metropolitan Market*

[3] *Indust Com*, vol x, pp 722, 736-737, Interstate Com Com, *Testimony on the Grain Trade*, 59th Cong, 2nd Sess, *Senate Document*, no. 278, p 855

[4] *Report, Minneapolis C C.*, 1896, p. 126

however, heavy investments in line and public terminal houses The mills bought most of their wheat as it came, unmixed, from the country, and the rest they bought from terminal elevators, when they needed it[1] The most common grain middleman in Minneapolis came to be the terminal warehouseman who owned country lines and bought, mixed, stored and sold grain in Minneapolis and through agents in other markets The largest of these was the Peavey system, which had headquarters at Minneapolis and offices at Duluth, Chicago, Kansas City and Omaha It had terminal houses in two or three markets, and bought grain on exchanges and at country line elevators throughout the Northwest This was not one closely organized system, but was composed of several units owned and controlled by practically the same people For instance, one director of the F H Peavey Company was president of a smaller corporation, vice-president of one and director of several[2] Though this group was exceptional in its size, in its business and in its organization it was very much like the other terminal companies in Minneapolis except that some also carried on a commission business, though through a separate organization The grain trade from the wheat fields to the English millers was, therefore, participated in by large warehousemen Almost all of them were recognized as "regular" by the Minneapolis Chamber of Commerce, so that they could do business on the exchange and deliver warehouse receipts on contract[3] The terminal houses which were doing storing only and the commission men felt the com-

[1] Interstate Com Com, *op cit*, p 913

[2] *Ibid*, p 896, *Minneapolis Journal*, Sept 2, 1895, p 1, *Commercial West*, July 20, 1901, p 22 and Oct 5, 1901, p 35, lists of officers of warehouses in *Reports, Minneapolis C C*

[3] Of a total capacity of 29,625,000 bushels in 1900, 6,850,000 were licensed as public storage by the state, and the rest was considered private, 27,680,000 bushels were listed "regular" by the Chamber of Commerce (*Report, Minneapolis C C*, 1900, pp 113-116, 121, *Report, Minn Rail and W'house Com*, 1900, p 131).

petition of these elevator grain dealers, principally because the latter could store cheaper than the other grain dealers and had the advantage of being able to mix and clean their own wheat[1] Nevertheless, there were enough public warehouses in Minneapolis to furnish storage for the trade of those who did not own warehouses There was not the control, approaching monopoly, by the warehousemen of Minneapolis, such as characterized the Chicago trade The effect of competition in storage at Minneapolis is seen in the fact that the charges were very much lower in 1900 than in the early nineties[2]

As noted before, the mills and elevators at Minneapolis, representing large investments, had to be sure of receiving a sufficiently large quantity of wheat From the early sixties through the years with which this study is concerned, the demand of Minneapolis tended to outrun the supply The millers and grain dealers, therefore, learned the necessity of a considerable control over a wide supply area From the late seventies commercial and mill lines of elevators had reached out into the wheat regions By 1888 the elevator system of Minnesota was definitely centralized in Minneapolis These early lines were favored by the railroads and were largely controlled by the Millers' Association Discrimination on the part of the roads and control by the millers had largely disappeared by the middle nineties Yet the lines were making strong efforts to maintain their power in the country trade

The Minneapolis line was the most common elevator in Minnesota's local wheat trade By 1901 there were forty firms reaching out over every railroad in the state along which wheat was marketed Some lines were mainly on one road, as for instance, the Atlantic on the "Soo", the

[1] Interstate Com Com, *op cit*, p 852, 860 and 913, *Indust Com*, vol. x, p 735

[2] *Report, Minneapolis C. C*, 1891, p 101 and 1900, p 116

Atlas on the Northwestern and the Empire on the Milwaukee. Others were on a number of roads The Cargills had elevators on all but two or three wheat-carrying railroads [1] Most of these companies had started ten, twenty or even more years earlier as country independents or lines

There is no evidence on which to base the relative strength of different companies or types of elevators for the whole state in the nineties From 1882 to 1888 the state railroad and warehouse commissioners published in their reports lists of elevators in the state Since then, no public or other agency has done this The only source from which such information can be obtained for the nineties is the record of leases kept by the railroads. Of these only a few are available, since many have been lost or destroyed From the ones preserved, very significant information has been gleaned, which may be considered fairly typical of the whole state in that it represents conditions on three types of railroads one which Minneapolis controlled, another a Chicago-Minneapolis road and a third a Duluth-Minneapolis road

The situation on the Minneapolis and St Louis, a road extending west from Minneapolis, is indicated by the following table, which gives annually from 1895 to 1900 the total number of leases for the three types of elevators, the line, the independents and the farmers'

Sites Leased on the Minneapolis and St Louis, 1895–1900 [2]

	1895	1896	1897	1898	1899	1900	Total	Per Cent
Minneapolis lines	43	2	..	2	3	8	58	71 60
Independents	9	....	..	1	5	7	22	27 16
Farmers'	1	....	..	..	.	...	1	1 16
Total	53	2	....	3	8	15	81	99.92

[1] *Commercial West*, March 30, 1901, p 10 and July 20, 1901, p 22

[2] Compiled from the *Lease Records of the Minneapolis and St Louis Railway*, in the Minneapolis offices of the road The writer has classified as independent the individual local elevators other than farmers', and as farmers' those which were known to be farmers' cooperatives

The Central, the Great Western and the Pacific were the only strong lines on the road The power of the Minneapolis lines and the almost complete absence of farmers' elevators are striking features of the situation on this road

For the Great Northern, a Duluth-Minneapolis road, records for a longer period are available Since this was the largest wheat road in the country—it, alone, brought more wheat to Minneapolis and Duluth than all roads brought to Chicago [1]—, its leases are given in some detail in the following table

ELEVATOR SITES LEASED ON THE GREAT NORTHERN, 1888–1900 [2]

	'88	'89	'90	'91	'92	'93	'94	'95	'96	'97	'98	'99	'00	Total	Per Cent
Minneapolis lines:															
Andrews and Gage	...	...	1	...	...	...	...	...	...	...	...	1	...	2	......
William Cargill	4	3		...	...	...	1	3	1	3	2	...	1	18	......
Duluth Elevator Co.	...	...	...	...	...	...	...	...	...	...	2	2	2	6	......
Imperial	...	...	...	...	...	...	1	...	...	5	2	2	1	11	......
Interstate	...	1	2	1	2	...	1	2	2	2	5	5	1	24	......
Minneapolis and Northwestern	...	1	...	...	...	1	...	1	7	3	4	1	...	18	......
Minnesota and Western	...	...	...	...	...	...	...	...	...	...	...	2	4	6	......
Northwestern	...	...	...	...	...	...	...	5	20	1	4	5	1	36	......
Osborne and McMillan	...	1	...	...	...	...	...	...	1	...	...			2	......
St. Anthony and Dakota	...	...	...	...	...	...	...	4	7	3	3	5	9	31	......
State	...	...	...	...	...	1	...	...	1	1	...		...	3	......
Total	...	...	...	...	...	...	...	...	...	...	...	...	...	(157)	72 78
Other lines:															
Red Lake Falls Milling	...	...		...	...	...	...	...	...	2	...	...	...	2	......
Stedman	...	...	...	...	...	1	...	...	...	2	...	...	...	3	......
Total	...	...	...	...	...	...	...	...	...	...	...	...	...	(5)	2 46
Independents	2	1	...	...	1	1	...	1	6	5	14	9	3	43	21 28
Farmers'	...	1	...	...	...	...	...	...	...	...	2	3	1	7	3.44
Total leases	6	8	3	1	3	4	3	16	45	27	38	35	23	212	99 96

[1] Interstate Com. Com, *Testimony on the Grain Trade,* 59th Cong, 2nd Sess, *Senate Document,* no 278, pp. 848-849.

[2] *Lease Records of the Great Northern Railway* in the offices of the road at St. Paul A few Minneapolis lines also did business in Duluth

The very large percentage of Minneapolis lines is a striking feature of the situation on this road Their strength was further increased by the fact that some of the independents worked more or less with the lines A significant difference is noted in the number of elevators started in the first and the second half of the nineties

On the Chicago and Northwestern somewhat different conditions prevailed The following table is a summary of the elevator companies leased on this road from 1888 to 1900

ELEVATOR SITES LEASED ON THE CHICAGO AND NORTHWESTERN, 1888–1900[1]

	'88	'89	'90	'91	'92	'93	'94	'95	'96	'97	'98	'99	'00	Total	Per Cent
Minneapolis lines															
Atlas	...	..	...	.		...	.	. .	..	..	16	1	..	17	. ...
Minnesota Elevator Co.	...	...	..	.		.	.	..		.		26	.	26	. ...
Van Dusen	2	5	10	3	9	2	1	1	1	.	1	1	1	37	. .
Other lines	...	.	.	1	...	...	...	...	...	...	...	1	..	2	...
Total	...	...	..	..	..	...	...	...		...	..	..	.	(82)	24 40
Winona lines	1	7	20	8	11	3	9	10	3	3	3	4	.	82	24 40
Local lines (other than Winona)	1	4	21	21	5	4	9	9	3	4	2	4	..	87	25 29
Chicago elevators	1	.	2	1	.	.	. .	.	.	1	...	..	4	9	2.68
Independents	5	4	23	5	10	3	1	2	1	1	4	5	4	68	20 23
Farmers'	. .	..	2	.	...	..	..	1	2	...	1	3		9	2 68
Total leases	10	20	78	39	35	12	20	23	10	9	27	45	9	337	99 68

The size of the Winona lines ranged from two elevators to sixteen and of the local lines from two to twenty one A large percentage of both were mill elevators Both the larger mills and the larger commercial lines were members

[1] From the *Lease Records of the Chicago and Northwestern Railway* in the offices of the road at Chicago These include no re-leases The membership lists of the Minneapolis C C and of the Chicago B T. as given in the reports of these organizations were used to learn which companies were members of the exchanges

of the Minneapolis Chamber of Commerce Chicago concerns did not own many elevators on the Northwestern, their influence was probably greater than this might indicate, although no definite evidence of that can be found The fact that there were so many elevator owners and that there was such a diversity of interests represented by the elevators along this road is explained by the policy of the road in regard to the grain trade, by the fact that the nature of the elevator system on this road was largely determined before the development of terminal country lines and by the variety of market influences, that is, of local mills and of Minneapolis, Winona and Chicago interests which entered into the grain trade along the Northwestern

The tables given above indicate that Minneapolis lines were very powerful in Minnesota in the nineties—especially in the wheat region west and northwest of Minneapolis Since these were able to have some control over independents, their strength was greater than the number of their elevators would indicate

Minneapolis, therefore, had a firm hold on the country wheat trade But its problem was not only to secure wheat, it was also to get a supply without unduly raising the price In addition to the competition of Chicago and Duluth, there tended to be considerable intra-market competition among Minneapolis concerns As noted before, the early lines and the Millers' Association attempted to control the supply area so as to weaken competition among Minneapolis interests With the development of the chamber of commerce and the appearance of shipping and export trading, a new type of rivalry was met. The commission men provided a market other than that of the mills for the independents, farmer shippers and track buyers It is most probable that the breaking up of the Millers' Association and of mill lines was due to the effect of having two interests

bidding against each other in the country markets The disappearance of the association marked the ascendancy of commercial lines and terminals To secure a sufficiently large supply without undue inflation of the price, they, too, combined

Although line elevators seem to have had an understanding with each other from the very first, a much more definite system of agreements appeared in the middle nineties This was apparently due to the fact that the competition of primary markets was becoming keener at that time, while state regulation of railroads and of grain markets tended to weaken the strength of certain lines and to lower their income from handling the grain, by stricter regulations concerning shipping, dockage, grading, weighing and warehousing

No system of lines—with the possible exception of one or two—had sufficient strength to maintain any degree of control over a large part of Minnesota's wheat trade But a fairly definite organization, which included most of the lines, had grown up by 1895 This was composed of practically all Minneapolis line owners on the Great Northern, the Northern Pacific, the "Soo" and the Minneapolis and St Louis By general consent a Mr Hoskins was agent for the business they had in common If certain men of this line group wanted to discuss business with which they were all concerned, such as leases, policies of railroads, margins, prices or the like, the agent called a meeting of the whole group. In this meeting the matter in question was discussed, and an agreement might be made concerning a common policy of the lines regarding it [1]

On the basis of agreements on margins made by this procedure, certain elevator men—usually some individual or group of special prominence—calculated, on the basis of

[1] Interstate Com Com, *Testimony on the Grain Trade,* 59th Cong, 2nd Sess, *Senate Document,* no 278, pp 475, 897-899, 932-943

closing prices at Duluth and Minneapolis, the amount which the price being paid in the country should be raised or lowered Information as to these changes was then distributed under the direction of the agent to various persons or companies trading at country points [1] Some system for the distribution of price information was an absolute necessity, one of the greatest difficulties of the early country markets being that of getting regular market quotations That this should have the reliability which none other than a responsible organization could give was essential But whether distribution of prices by a line organization filled the need in the most satisfactory way was another question. The greatest difficulty with this method was that it made for a regularity which facilitated the making of agreements and pools

There was no attempt on the part of this group to control prices in all markets where they were buying. In fact, at stations where there was outside competition the agents paid above this so-called list price in order to get the grain But as far as possible the lines tried to eliminate opposition by driving out or controlling competitors At points where there was no effective competition with the lines, the Minneapolis line group agreed to pool the quantity of wheat bought At one time 950 elevators and forty companies were in this pool This was not an avowed price agreement, but it was virtually so, for a penalty of 2½ cents was imposed for each bushel bought above the quantity agreed The common agent of the group provided a clearing office for penalties The managers of the individual lines held their country agents, who were bonded to follow line orders, to the agreement. If one agent violated it, he not only subjected his company to the penalty but he was likely, further, to disturb the equilibrium brought by the understanding

[1] Interstate Com Com., *op cit.*, pp 875-876, 942-943, 946-948, 990.

Where such agreements were effective, they kept the margin considerably above what it was where buying was competitive But at competing points, on the other hand, the margin was, at times, so low as to be unremunerative It is impossible to say how successful this system of pooling was, but the fact that it existed for some time indicates that it was effective [1]

Such were the more significant developments in relation to the primary markets By 1900 the large wheat middlemen, more especially the warehousemen, had progressed far in the size, extent and power of their organization As has been noted, this came in response to very definite conditions in the wheat market At the same time the counter movement of producers was developing further with the purpose of checking the great power of the elevators, which, it was thought, were threatening to monopolize the market

In order to understand why and how the farmers tried to meet this problem, it is necessary to examine the functioning of the country markets, where the producer and the middleman met—the most strategic point for the latter According to his observations there, the farmer formed his judgments about the market, made his demands for reform and took action to change conditions

The first question for the farmer in marketing his grain was when to sell Many thought it profitable to hold the wheat The idea was quite commonly held that prices were lower in the fall than in the spring, because of the manipulations of the grain dealers or the pressure of an inflated crop movement This impression was based partly on accurate observation and partly on a misunderstanding of the marketing system

[1] *Indust Com*, vol x, p 717; Interstate Com Com, *op cit*, pp 848-849, 859-866, 892, 894, 898, 913, 915, 953, 955, 968, Federal Trade Com, *Grain Trade*, vol i, p 83 and vol iii, p 14

On the whole, prices at country markets followed primary figures In case of congestion, making it difficult or impossible to handle all the grain offered, a considerable depression of the price below that in other markets might occur Such occurrences were, however, irregular That the fall price was with any degree of regularity or consistency depressed was not true, for a series of years the price at the end of the crop year was only sufficiently larger than at the beginning to cover carrying costs At Minneapolis from 1890 to 1900 the average excess of the average price of no 1 northern for the four months at the end of the marketing year (May to August) above that at its beginning (September to December) was 2 44 cents [1] The difference was not, however, so regular from year to year The highest gain for any year was above 13 cents, and the highest loss was over 10 In seven years there was a gain, in four a loss

But the costs in holding the grain largely neutralized the gain If the wheat could be stored in the farmers' own granaries, there would be no storage charge But rats and mice might damage the grain, wheat would deteriorate if too damp, or lose weight if too dry Grain men estimated that there was a shrinkage of about 1 per cent through the winter [2] The grain had to be aired and turned regularly in order to keep it in good condition There was also danger of loss by fire, which could be covered only by insurance The interest cost was considerable—generally about 2 or 3 cents a bushel according to prices and interest charges If the grain were stored in a public elevator, insurance and losses from deterioration were carried by the elevator, but there was a storage charge of 4 to 5 cents a season [3] Loans

[1] Average prices based on monthly average of high and low closing cash prices for no 1 northern in the *Reports, Minneapolis C. C.*

[2] *Indust Com*, vol x, p. 739.

[3] *Report, Minn Rail and W'house Com.*, 1895, p 91; *Indust. Com.*, vol x, p 739; *59 Minn*, p. 90.

could be gotten on elevator receipts, but interest rates were so high as generally to neutralize gains after the storage charge had been paid Except in irregular instances, the gain in holding grain was, therefore, not great The risk was so considerable that a farmer having no reserve or a small one could not afford to take it That holding was not profitable is suggested by the fact that operators of large farms generally sold immediately after threshing, for they thought that the gain in any event scarcely justified the cost Still, many farmers held their grain, thus in a sense assuming speculative risks for the carrying of which they had neither sufficient resources nor market information It is true that it was impossible for the farmers to foresee what the price would be, but experience from year to year was a useful teacher One of the most significant developments in the wheat market was the narrowing of the difference between fall and summer prices, so that the farmers could dispose of their crop in the fall without the great loss which they so often sustained in earlier years [1]

The next question was to whom the farmer should sell The grain might be sold and shipped directly to a miller or a terminal elevator, but more generally it was consigned to a commission merchant to be sold on the exchange [2] There was one great advantage for the farmer in selling in a primary market If the wheat were of a higher quality within a grade, a premium might be received over the grade price [3] But it was not generally practical for the farmers to ship Except in case of traffic congestion there was no particular difficulty in securing cars. It was difficult, however, to load a car in the time allowed [4] This was becoming more and

[1] *Indust Com*, vol x, pp 799, 801 and vol vi, p 29.

[2] *Ibid*, p 795; Interstate Com Com, *op cit*, p 858; *Representative*, June 27, 1894, p. 1

[3] *Indust Com*, vol x, pp 738, 855

[4] Interstate Com Com, *op. cit*, p. 858

more of a problem with the increase in the size of cars Wheat could be loaded through the elevator, but there might be a loss in the quality of the grain because of mixing, and there was a maximum elevator charge of 2 cents a bushel [1] The farmer who shipped also had to pay the freight and commission charges and assume risks of delay in forwarding, of loss of grain *en route* and of decrease in prices

The farmers, therefore, generally sold to the local elevators Whether or not they got a fair deal in the country market depended on the farmers themselves, on the buyers and on conditions in that and neighboring markets

A feature of the local market which is generally overlooked is the extent to which the personal element determined what the farmers got for their grain [2] To a certain degree, as much depended on how the buyer "graded" the farmer as on the grading of the grain The buyer was interested in driving a good bargain If he dealt with a progressive, intelligent farmer who knew the prevailing price and could judge with a fair degree of accuracy the quality of the grain, he was quite certain, except in monopoly markets, to give a fair deal—or even more—to get the grain But the buyer was ready to take advantage of the other type of farmer A somewhat extreme case of this kind illustrates such a situation A certain buyer offered a farmer 50 cents a bushel of grain at the rate of 50 pounds a bushel, since the farmer demanded more, the buyer raised the offer to 51 cents for 51 pounds, on the condition that the farmer tell no one—and the offer was accepted! [3] Then there were

[1] *Report, Minn Rail and W'house Com*, 1895, p 91.

[2] Much of this information on country markets has been gotten from interviews and correspondence with men who were familiar with conditions described

[3] Interstate Com Com, *Testimony on the Grain Trade*, 59th Cong., 2nd Sess, *Senate Document*, no. 278, pp. 30-31.

some farmers who thought it not amiss to get even with the elevator in a way which was not strictly honest This gave the buyer an added motive for using any advantage which he had Not all the difficulties in the country markets were the fault of the line management They were at times as little satisfied with some of their men as were the farmers It was to be expected that a more or less transient occupation at a comparatively low salary should not always attract the most honest and intelligent buyers, though line agents were often as desirable as many other business men in the small towns [1]

More obviously significant was the condition as to competition That is, if there were agreement between elevators, the farmer was less likely to get satisfactory results It is impossible to say to what extent agreements existed, but the fact that many Minneapolis lines had a regular pooling arrangement shows that this was a regular part of the grain trade [2]

Weight, dockage, grade and price were more or less variable according to conditions in a market The farmer might, justly or unjustly, find these unsatisfactory and yet not gain by offering his wheat to any other buyer in the same or even in a neighboring town. Weighing was corrected to some extent by state supervision and by the fact that farmers were beginning to own scales and weigh their grain before bringing it to market Dockage and grade were, by this time, under the control of the state department to the extent that they could investigate on complaint [3] But farmers were hesistant and careless about reporting difficulties In fact, the feeling was general that the state inspection de-

[1] Interstate Com Com, *op cit*, p 893, *Indust Com*, vol x, p 802

[2] *Cf supra*, pp 235-236

[3] *Report, Minn Rail and W'house Com*, 1895, p 92

partment was so thoroughly in sympathy with the elevators that complaint was useless[1]

Discrepancies in price were obvious and they were not subject to effective regulation by any state agency Under normal competitive conditions the price at country points was equal to that in the primary market minus the freight charge and a reasonable margin for handling. The margin would be determined by the cost of operating at the different stations, by the quality of the grain and by the possibility of getting cars for shipping The cost of maintaining an elevator per unit of grain handled was determined quite directly by the volume of an elevator's business For one handling 50,000 bushels annually, the direct operating costs, without insurance, depreciation and interest on the investment, was somewhere around 1½ cents a bushel[2] If the quality of wheat were poor, a higher margin was required to cover the extra work and risk[3] Uncertainty as to whether or not cars could be secured also raised the margin[4] The grain men complained more of inability to get cars than did the farmers Since their income depended on the amount of grain handled, any interference with shipping caused them loss For wheat the margin commonly considered a fair one was 3 cents, but where there was no effective competition it was higher[5] The variations were not usually large, for too high a margin would bring in a competitor There were some places, however, where potential competition was very

[1] For contemporary judgments regarding irregularities *cf Indust Com*, vol x, p 854, and Interstate Com Com, *op cit*, p 854 The election of 1898 advertised dissatisfaction with state warehouse supervision and state inspection.

[2] Interstate Com Com, *op cit*, p 910, *Indust Com*, vol x, p 738.

[3] *Ibid*, p 730; Interstate Com Com, *op cit*, pp 873, 899.

[4] *Ibid*, pp 898-899, 904

[5] *Ibid*, p 869, *Indust Com*, vol x, pp 730, 856.

weak, because competitors feared entering where there was a strong combination[1]

The fact that elevators at a station or at groups of stations refused to bid against each other caused a direct loss to the farmers Under such conditions there was considerable justification for a common feeling among wheat farmers, which was so vividly expressed by the president of the Grain Growers

Is there anything under the canopy of heaven more degrading than a man's not being able to set a price upon the staff of life which he has raised? On every other product of every country in the universe, including our own, a man is able to set a price. I can go north, east, south or west 10, 20 or 30 miles, and the price is just the same I have no more to say about it than the man in the moon There is something wrong.[2]

But this was attributed to monopoly to an extent which was hardly justified Some farmers did not understand the functioning of the wheat market, which was so closely knit and so highly organized that the possible range of prices was narrow. Many considered the ideal market one in which the price was made by bargaining between the producer and the buyer But wheat was sold in a world system where producer and consumer were far apart and where the price was determined by a process so intricate that to try to set one's own price was to eliminate oneself In this, as so often, farmers selling in an inter-metropolitan market were thinking in terms of the village

There was one real difficulty in the matter of price which was essentially a question of grading It was the established practice of elevators to buy grain on grade only, and to give no recognition to superiority within a grade Wheat might,

[1] *Indust Com*, vol x, p 939 and vol vi, pp 66-67

[2] *Ibid*, vol x, p 716

for instance, grade no. 1 hard but be of so exceptional a milling quality that it would bring a premium of 3 to 7 cents in the primary market.[1] It would appear that the price of a grade would adjust itself so that there would be no loss at least for average grain in a grade. That this did not occur was due to the practice of "mixing" carried on so extensively in the larger markets, whereby high-quality grain of two grades was combined so as to raise the lower grade to the higher. Much of the grain sold on the exchanges, especially in Chicago and in the East, was mixed so as to be barely within a grade. The price, therefore, came to be the price for the lowest quality that could possibly be in a grade. This did not properly compensate the farmer who raised superior grain.

An interesting change occurred by the middle nineties in the farmers' allocation of the cause of undesirable marketing conditions. Where they had formerly blamed the railroads, they now blamed the warehousemen. They had come to believe, especially in the Minneapolis and Duluth territory, that the roads were on the whole fair toward the farmers as far as discrimination was concerned. They had no difficulty in getting cars, except at non-competitive points or when the traffic was so lively that a road might favor the shipper who could load fastest.[2] Discrimination in the granting of elevator sites had almost disappeared.[3] Inequality in rates between different stations was very rare, as was also any proof of rebating, though this was said to exist.[4] That

[1] *Indust. Com.*, vol. vi, p. 68 and vol. x, p. 855; Interstate Com. Com., *op. cit.*, p. 1017. The *Indust. Com.*, vol. vi, p. 69, estimates this to be a loss of $15,000 to $35,000 a year for a community marketing 500,000 bushels of wheat.

[2] *Indust. Com.*, vol. x, pp. 709, 722, Interstate Com. Com., *op. cit.*, p. 11; *Report, Minn. Rail. and W'house Com.*, 1894, p. 16 and following reports. The absence of complaint is more striking than direct evidence.

[3] *Indust. Com.*, vol. x, p. 709.

[4] *Ibid.*, pp. 722, 736; *Report, Minn. Rail and W'house Com.*, 1900, p. 26.

which the farmer had thought to be the basis of monopoly had largely disappeared, but monopoly still existed The newer problem was how to attack the powerful warehouses and grain dealers who had elevators and agents all over the Northwest

The revival of the farmers' cooperative movement in the middle nineties was the most promising attack made on the combination of elevators in country markets [1] Complete data on the extent of this movement are not available [2] Some idea as to the number of companies organized is gained from the lease records of the railroads On the Minneapolis and St Louis only one farmers' cooperative, the Hazel Run Produce Company, was given a lease before 1900 [3] On the Great Northern the following were granted sites in 1898, the Farmers' Elevator Company of Cokato and the Farmers' Alliance Grain Warehouse at Fosston; in 1899, the Farmers' Grain Association at Albany and the Farmers' and Merchants' Cooperative Association at Litchfield; and in 1900, the Farmers' Elevator Company at Danvers [4] On the Northwestern a number of farmers' organizations leased sites. the Farmers' Produce and Supply Company of Canby in 1894, the Farmers' Alliance Elevator at Lewiston in 1895, the Quincy Alliance Company at Dover and the Farmers' Elevator Company at Pine Island in 1896; the Farmers' Produce Company at Porter in 1898, and the Farmers' Elevator Association at Ghent and the Farmers' Grain Association at Taunton in 1899 [5] There may have been others adjacent to the railroads' land, but of such there are no

[1] *Cf supra*, pp 193-194, 215-219

[2] License records of rail. and w'house com cannot be found After 1900 cooperative journals have collected considerable data, but not earlier

[3] *Lease Records of the M and St. L*

[4] *Lease Records of the G N*

[5] *Lease Records of the C N W*

records In comparison with the total number of sites leased on these roads, the farmers' companies were few in number 1 23 per cent on the Minneapolis and St Louis, 3 44 per cent on the Great Northern and 2 64 per cent on the Northwestern [1] In 1900 there were thirteen farmers' elevators on the Northern Pacific having capacities ranging from 5,000 to 25,000 bushels Several of these had been organized in the years from 1885 to 1887 There were none on the Chicago and Great Western and only a few on the "Soo" which were real farmers' cooperatives [2] The most important single organization was the Grain Growers Association, which had ten elevators on the Milwaukee, the Great Northern and the Northern Pacific near the boundary of the state directly west of Minneapolis [3] This organization planned to establish a terminal house at Duluth [4]

The immediate cause of the revival of this movement was the feeling among the farmers that elevators were getting more than a reasonable compensation for handling wheat A number of factors helped make the movement possible Very important was state legislation on railroad discrimination.[5] Further, local capital for financing farmers' organizations had increased [6] It is possible that commission merchants were encouraging the farmers as opposed to line-terminal-grain merchants [7] Then, too, the cooperative idea had been tried and found useful, and had been advertised by the Farmers' Alliance

[1] *Cf supra*, pp 231-233

[2] *Indust Com*, vol vi, p cccxxiv and app A, pp 454-456

[3] *Ibid*, vol x, p 722

[4] *Minn Gen Laws*, 1899, ch. 300

[5] *Cf supra*, ch. viii, *passim*

[6] *Indust Com*, vol vi, pp 136-137; Federal Trade Com, *Grain Trade*, vol iii, pp 184-188.

[7] *Indust Com.*, vol x, p. 723 and vol vi, pp 136-137

That the farmers' elevator was a most valuable weapon with which to attack combination in the local market was proved. It was fought, like any competitor of the line, by overbidding [1] But the cooperatives had certain definite advantages over other elevators First, they did not aim to make any profits, for their purpose was to market grain cheaply, not to declare dividends Though they, like the lines, had to employ a buyer, the expense of management was small [2] Some also handled coal, wood, livestock and even machinery so that the agent was earning a little on the side to help with expenses [3] When a farmers' elevator was successful, it attracted a larger volume of business than others, which cut its operating expenses per unit handled They had the disadvantage of not having a powerful and efficient organization behind them, and of being forced to rely on commission men and to pay the commission charge in order to sell their grain But, if properly managed, these cooperatives could afford to run on a narrow margin [4] They could pass on to the farmers the premium which millers and eastern dealers paid over line grade [5] They could also provide storage at a lower charge [6] Whatever the cooperatives did in the way of price had to be met by the line, so that the market was better wherever the competition of a farmers' elevator was felt Another result of this movement was that it helped familiarize the farmers with the functioning of the market,

[1] Conversation and correspondence with men active in this movement

[2] Managers were paid about $10 a month, and sometimes even this work was done by the buyer

[3] *Farm, Stock and Home,* vol xiii (Nov, 1896), p 15

[4] Interstate Com Com, *Testimony on the Grain Trade,* 59th Cong, 2nd Sess, *Senate Document,* no 278, pp 11, 69, 915

[5] *Indust Com*, vol. vi, p 68

[6] *Ibid*, pp 69, 79, testimony of J J Hill in Interstate Com Com, *op cit*, p 857

and thus made them more intelligent in their attacks on market problems

With one exception, there was little resort to political methods from 1894 to 1900 for protecting the farmer in the wheat trade This one instance, however, brought a significant change in the railroad and warehouse commission

The system of state terminal inspection had become a very important factor in the primary markets of the state Practically all the grain arriving in Minneapolis, St Paul and Duluth was weighed and graded by agents of the state Even private warehouses asked to have state inspection In 1897 the system was extended to St Cloud, Fergus Falls, Little Falls and Winona, in each of the three first cases to facilitate the moving of wheat at Minnesota's terminals, and in the case of Winona to bring under state inspection grain which was not brought to Minneapolis, St Paul or Duluth [1]

Although state inspection was regarded as necessary, there had always been more or less criticism of the personnel and functioning of the system This criticism became especially acute in 1898 It began in Clay County and spread over the Red River Valley, charging that the state department was incompetent and corrupt, that it inspected in the interest of the buyers, giving the grades no 2 or 3 on "in" inspection for grain which inspected "out" no 1, and that its dockage was unreasonable, unjust and excessive [2] The Democrats, who had always been more or less critical of this state service, led the controvery, and were joined by the Populists and Silver Republicans, with the result that John Lind, a Democrat, was elected governor.[3]

[1] *Minn Gen Laws*, 1897, chs 30 and 123

[2] *Minn House Jour.*, 1899, p 14, Lamphere "Hist of Wheat Raising in the Red River Valley," *Minn Hist Soc Coll*, vol. x, pt. i, p. 28; "Report of Joint Com on Grain Inspection," *Minn House Jour*, 1899, app, p 1 *et seq*, St. Paul and Minneapolis newspapers of Sept. and Oct, 1898

[3] *Ibid*, Lamphere, *op cit.*; *Appleton's Ann Cyc*, 1898, p 458

The farmers did have some cause for complaint, but they seem to have attacked the commission for irregularities which did not exist The chief inspector admitted in a legislative investigation that they graded more rigidly in the first few weeks of the crop movement until they became familiar with the new crop [1] This was decidedly bad for the farmers, since one third of their wheat was thus marketed under rigid inspection It is true that no two crops are exactly alike, but experienced grain men should not require a very long time to become familiar with the characteristics of a crop For the inspectors it can be said that they evidently were concerned about keeping up the high standard of Minnesota's grades in other wheat markets and that they were not doing this to favor the grain merchants [2] But not all the accusations brought against the inspection system could be substantiated Mr Grandin, a bonanza farmer who had as much interest as anyone in this controversy, Peter Rahilly and Ignatius Donnelly, veteran enemies of the wheat middlemen, and C S Pillsbury, a miller, supported the railroad and warehouse commission and the state inspection system.[3] A contributing factor in the controversy was undoubtedly the poor quality of wheat in some sections of the Red River district that year. It was an unusually wet threshing season, so that grain was badly damaged by smut, was stained and shrunk and, therefore, of low grade There was also a large percentage of cockle, a seed which lowers the milling value of wheat but which could not be separated from grain by any cleaning machinery then in use.[4] The evidence indicates, on the whole, that there was some cause for complaint, but that this was greatly affected by crop conditions

[1] *Minn House Jour.*, 1899, app, pp 1-10

[2] *Ibid*, p 1 *et seq*

[3] *Report, Minn Rail and W'house Com*, 1898, pp 41-42, 50-53

[4] *Ibid*, pp 46, 182-185

and was seized upon by opposition political elements for campaign purposes[1]

This episode is significant because of the change which it brought in the railroad and warehouse commission, which had charge of the system of state grain inspection and supervision The legislature elected in 1898 passed three acts further to safeguard the farmer in the market One provided for the licensing of commission merchants[2] Another enacted a demand which had been made by the Alliance since 1886 and which was most urgently supported in 1898—popular election of the members of the railroad and warehouse commission[3] The system was further safeguarded by a board of appeals for the inspection department This board, to be appointed by the governor, was to consist of two divisions, one at Duluth and one at Minneapolis, each consisting of a producer, a grain commission merchant and an exporter, miller or grain merchant, or of representatives of these respective interests, not more than two of whom should belong to the same political party This board should hear appeals from the decision of the chief inspector, should report incompetence to the railroad and warehouse commission and should prescribe state grades[4] Some changes were made in the power of the railroad commission over rates There had been for a long time considerable dissatisfaction over rail charges, although individuals hesitated to make complaints on which the railroad commission could act, for fear of arousing the enmity of their local agent. In 1897 an act was passed which gave the commission power to investigate rates and recommend changes

[1] The elections of 1878, 1892 and 1898 could very interestingly be studied and compared as to their causes and points of attack.

[2] *Minn Gen Laws*, 1899, ch. 225.

[3] *Ibid*, ch 39

[4] *Ibid.*, ch 199

on their own initiative without any complaint having been made[1] Another act was passed in 1899 which further limited the roads in the matter of charges by requiring that they would have to secure permission of the commission before they could raise rates[2]

Thus the power of railroads and grain men was further limited by increased state interference, and control of the railroad and warehouse commission, the main agency of the state in this matter, came to be directly in the hands of the voters

Since farmers' marketing movements were primarily interested in marketing costs, it is well to note what these were at the end of the period covered by this study Comparison of prices in different types of markets indicates what the costs were in terms of the value of the grain On the nineteenth of October, 1900, a date chosen at random in the most active part of the crop movement, Minnesota no 1 northern wheat was 89 2 cents at London, 83 6 cents at New York, 75 7 cents at Minneapolis and 67 cents at Graceville, a country wheat market near the western boundary of the state, directly west from Minneapolis[3] In other words, there was a difference of 22 2 cents in the Minnesota country price and the London price This was considerably less than the difference in the earliest nineties[4] The average of the weekly prices at Graceville for the whole year, 1900, was 61 5 cents, the average for corresponding dates was 71 8 at Minneapolis and 81 07 at New York[5] The cost of bringing wheat from

[1] *Minn Gen Laws*, 1897, ch 67 Another, ch 284, prescribed the form and content of annual reports of roads

[2] *Ibid*, 1899, ch 100

[3] *London Times*, Oct 20, 1900, *Report, N Y Prod Exch*, 1900-01, p 55, *Report, Minneapolis C. C*, 1900, p 67, *Graceville Enterprise*, Oct 19, 1900

[4] *Cf supra*, p 201

[5] *Graceville Enterprise*, 1900, *Report, Minneapolis C. C.*, 1900, pp 58-69, *Report, N Y Prod Exch*, 1900-01, pp 50-56

Graceville to New York was 17 57 cents, over half of which was required to carry it a distance of less than 200 miles to the primary point, Minneapolis This indicates that the cost of assembling in a primary market was out of all proportion to the cost of carrying to the seaboard In terms of percentage, the country price was 75 85 per cent of the export price, which meant that the farmer received over three quarters of the export value of his wheat This was about 25 per cent more than he received in the river period [1]

Of the marketing costs the largest was the transportation charge The transportation cost from Graceville to Minneapolis was about 8 cents, and to New York about 13½ [2] The remainder of the difference in prices at the two points was hardly enough to cover commission, elevator and transfer charges [3] For this reason, grain men said, it was necessary to "mix" grades and clean grain in order to make a profit.

What the irregular costs were, it is impossible to determine. Unsatisfactory grading and prices still prevailed in the country markets to such an extent as to make this problem a serious one Conditions at those points and relatively high transportation costs to primary markets were the two most serious problems remaining in the system for marketing Minnesota's wheat

[1] *Cf supra*, p 53

[2] Rate schedules in *Report, Minn Rail and W'house Com*, 1898 and 1900; *Indust Com*, vol x, p 708, *Report, Buffalo Merchants' Exch*, 1900, p 90 and 1902, p. 99 The rate by charter from N Y to Liverpool was 6¾ cents (*Report, N Y Prod Exch*, 1900-1901, p 71). These are all annual averages.

[3] Given for each market in the reports of its exchange

CHAPTER IX

Conclusion

A study of the history of the wheat market in Minnesota shows definite periods, which were the result of various influences—chiefly, of the particular state of local development at any one time, of the nature of the primary market with which the trade of any locality was affiliated and of the general condition of the world market as to price and organization

The first period was an undeveloped, unsystematic pioneer condition which may be said to have ended about 1867 The rapidly increasing wheat supply of the settlements extending westward from the Mississippi sought a market in the river towns, where capital, storage, transportation, middleman agents and indefinite relations with consumers' markets were not suited to the handling of a large trade in an efficient way Many small middlemen appeared, with the result that the markets took on an appearance of lively competition. The local situation, as well as the whole marketing system, made for very unstable conditions for both middleman and producer

Then came a series of developments which were, in the main, attempts at adjustment to changing conditions. New methods of handling grain came into use in the primary markets Locally, the power of the middleman increased and that of the farmer diminished, which was largely the result of the growing power of grain carriers Even before 1867 a few large wheat dealers had appeared on the river, as allies of various packets and of Milwaukee and

Chicago roads which were trying to gain control of Minnesota's trade The alliance of buyers with transportation agencies was a natural development under the system of competition then existing, but it gave those buyers a hold on the trade which tended to destroy equality among traders

As the railroads reached out into southern Minnesota, they also found it profitable to take a hand in the wheat trade There were few local people having sufficient capital or market experience to buy wheat, for the roads were extending into comparatively undeveloped, pioneer country Because of the newness of the territory they were forced to seek trade Hence they used various devices for encouraging certain individuals to enter the wheat trade and to supply the roads with freight This gave the railroads and their favored wheat dealers a definite measure of control in the local market Competition of different roads for trade also made them favor competitive points, and they tried to offset the lower rates at those points by higher rates at less fortunate places Discrimination between persons and places became the rule

Out of these conditions grew in Minnesota the political phase of the Granger movement, which was essentially an effort on the part of producers and of middlemen suffering from discrimination to protect themselves The legal right of the state to prescribe rates was established, but after a short experiment state interference was practically abandoned, and there was a return to a *laissez faire* policy

The next step was the growth of powerful lines of elevators and grain buyers extending into the wheat country from the young market, Minneapolis By the middle seventies this town had a milling industry which was growing faster than the amount of wheat seeking the market, and it had become a center for roads which radiated to nearly all parts of

the state The millers needed wheat, and the roads, individually, wanted to increase their traffic Lines of elevators, favored by the railroads and backed by the resources of the millers organized in an association, reached out into the country southwest, west and northwest from Minneapolis In the southeastern part the railways favored shipments to Milwaukee and Chicago, and although no important middlemen from these markets reached Minnesota, large local dealers arose who were favored by the roads

This condition produced a situation which was to bring its own defeat The farmers, irritated by the fact that they seemed almost helpless in the market, and pressed by falling prices, demanded that something be done to curb the power of the railroads and wheat dealers Following the example of other states, they secured the passage of legislation to improve conditions in the primary markets and to strike at railroad discrimination, which was considered the root of difficulties in country markets Because of this legislation and because of changed economic conditions the alliance between the roads and warehousemen was largely destroyed.

But even so, conditions in the country markets, the most strategic point for the producer, were not greatly improved Increased competition of primary markets, falling prices, demands of producers for lower marketing costs and the efficiency of large, integrated marketing agencies tended to bring the grain trade at Chicago, Duluth and Minneapolis and in their supply areas into the hands of powerful warehousemen, who attempted to increase their hold on the trade. In Minnesota, Minneapolis obtained considerable control over the local wheat trade A new monopoly was taking the place of the old

In addition to a continued strengthening of the system of state control, a new means of protecting the producer, by farmers' cooperative marketing, became significant With

terminal markets fairly open to farmers, with railroad discrimination weakened and with increased local capital and experience in marketing, the cooperative movement, which had started in 1885, became active toward the end of the century The next phase of market development was to be the growth of these cooperatives—particularly in the country—which became effective regulators in local markets

The object of the producers and the middlemen, in their contests for power in the market, was to increase or maintain their share of the value of the wheat in the world market There was no real attempt to influence the world price of wheat, that was impossible with the diversity of producers and middlemen competing in the market The question was the distribution of a value fixed beyond their control By 1900 the proportion of the value of the wheat going to the middlemen handling Minnesota's wheat had decreased—a change which was compensated for by mechanical improvements in carrying, transferring and storing grain and by more efficient methods of organization—and the proportion received by the farmer had increased

The extent to which middlemen and farmers benefited by the development of a more efficient marketing system is problematical Prices fell considerably faster than marketing costs What the causes of this may have been the present study has not touched But it is evident that the farmers' position had been improved, in that greater regularity had been secured in the market through the curbing of the middleman's power The latter was becoming more and more merely an agent who reflected values from the larger markets, but who did not determine to any significant extent, beyond competitive marketing costs, the price paid for the farmers' wheat

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Very considerable information was gained from interviews with some forty men and women and from correspondence with ten, all of whom had had first-hand acquaintance with the subject matter of this study Since many requested that their names be not published, it must suffice to note that these included farmers, merchants, different types of grain middlemen from local elevator managers to members of the Minneapolis Chamber of Commerce, railroad officials, editors, bankers, lawyers, teachers, a steamboat captain and others While the material secured in this way has to be used with care, it has, nevertheless, been most valuable

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